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Educational News and Editorial Comment

A YEARBOOK ON SUPERVISION

The principals and the supervisors of the public schools of Dayton, Ohio, have an association which holds professional and social meetings throughout the school year. At the end of the last school year this association issued a yearbook containing the material which had been presented at its professional meetings. This yearbook is "published under the authority of the Board of Education of the city of Dayton, Ohio." It contains a series of reports which are for the most part in the form of committee discussions of topics of importance to the supervisory officers of a public-school system. Some of the reports are accompanied by bibliographies; some contain quotations from current writings bearing on the topics dealt with in the reports. The yearbook is an attractive paper-covered book of eighty-four pages.

The following extract from the section entitled "The Relation between the Principal and the Supervisor of Special Subjects" is typical of the yearbook.

Special supervisors are experts in their particular fields, with some special functions falling within their scope: (1) questions of technique, (2) helpful suggestions as to best methods.

Principals are experts in general management and are not expert in all or any of the special lines. They should have ability (1) to judge reactions, (2) to guide and advise in a supervisory capacity of a general nature, (3) to unify the work of their schools and harmonize instruction throughout the grades, (4) to make good teaching possible.

Someone has said, "Co-operation is the outstanding need of supervision." The principal, supervisor, and teacher should be a trio working together for the benefit of the pupil.

Owing to the tremendous increase in school population within the last five years and a corresponding anticipated increase for several years, much of the principal's time now and in the future years must of necessity be given to the discharge of administrative and executive duties. Then, too, schools are continually feeling the pressure brought to bear by demands from outside agencies. It is the principal who must see that these demands are met, and so even the principals with the smallest enrolments have little time in the program for direct supervision of teachers.

What principal can do the observing that he would like to do? What principal has sufficient time to give the new teacher a demonstration lesson? What principal has time to discuss new and practical methods in education with his teachers?

Certainly it is not reasonable to expect a principal to do this type of supervisory work in addition to the executive and administrative duties that he is called upon to perform in solving the many problems of discipline and school management peculiar to his own building. If time were allowed, it would be a fine thing to have the principal accompany the supervisor on her visit through the building.

The solution of this problem is the help of an able assistant who by virtue of her very training can assume the more difficult supervisory problems. This supervisor, being an expert in her field, should render invaluable service and do most effective work provided there is a spirit of helpful co-operation maintained. Helpful co-operation can only be given when local conditions and problems are understood by the supervisor and the principal.

Since the supervisor has but a limited time in each building and the teacher has a right to expect all help possible from this expert, work should be so arranged that nothing will interfere with the supervisor's schedule on her day for visiting.

This schedule, of course, should be arranged after the supervisor has conferred with the principal, who has jurisdiction over the building at all times. No one knows the organization, the teachers, the problems of a building better than the principal of that building, and a supervisor should consult with the principal upon all such matters so that she may have a more sympathetic understanding of conditions in that particular building.

Likewise, the principal should have a general knowledge of the plans that the supervisor intends to carry out while in this building. The principal should offer suggestions, if she desires, as to how these plans may best be carried out.

The principal should feel at liberty to ask the supervisor to give any help that in her judgment would be of benefit to the school in general or to any teacher or group of teachers in particular. For instance, asking the supervisor to give a demonstration lesson or an explanation in detail of methods that the supervisor wishes to be used would not be unreasonable.

CONTINUATION TRAINING OF TEACHERS IN SERVICE AT A STATE NORMAL SCHOOL

Charles Russell, principal of the State Normal School at Westfield, Massachusetts, has devised an ingenious method of securing teaching opportunities for the Seniors in his school and at the same time helping the graduates who left the institution the year before and are engaged in teaching. He arranges for a week of conferences at the normal school in the spring. The graduates of the previous year turn over their schools and their boarding-places to the Seniors, who carry on the regular work. The graduates come to the normal school and present the problems which experience has shown need solution. The normal-school staff and additional instructors from other institutions conduct conferences and answer questions.

In preparation for this week of conferences the graduates send in series of questions. These questions are assembled and mimeographed as the basis for the discussions at the conferences. The questions used last spring are as follows:

READING

Has a willing pupil who cannot enunciate clearly.
How to test oral reading of child who has a speech impediment.
Is word drill in second grade "detrimental"?
Is word drill advisable for backward pupils?
Wants seat work for second grade.
Child cannot answer problem questions.
Children cannot understand what they read nor eliminate nonessentials.
Has foreign children handicapped by limited vocabulary.
Children cannot get thought.
Two other pupils and whole second grade who can read only in primer.
Wants good reading book for sixth grade.
Wants help in silent reading.
Shall she teach "families" and phonetics to children of fifth grade who are very poor readers?
Has pupils who cannot sound words and are very poor readers.
Wants special methods and devices for teaching phonics: *ou*, *ea*.
How to measure definitely improvement in reading.

SPELLING

Children learn their spelling lessons but do not spell same words correctly in other subjects.

MUSIC

Should second-grade children be taught from music reader?

Music supervisor a very poor teacher. Children have lost interest in music. What to do.

Boys won't sing.

Can't teach music.

ART

Wants good magazine with art suggestions for all grades.

Pupils dislike art and do poorly in it.

PENMANSHIP

Can't get readable results.

Shall she teach a system of handwriting?

Should primary children have large pencils for writing?

NATURE-STUDY

Wants nature-study topics for lower grades.

No time for nature-study; has to correlate with English and art; no reference material. Suggestions.

PHYSICAL EDUCATION

Is there any safe exercise for asthmatic child?

Wants playground work—games, etc.

Shall she have formal gymnastics or games in Grades III and IV?

Shall she have formal gymnastics or games in Grades V and VI?

SOCIAL STUDIES

Shall she use the same topics for the whole (rural) school or make them different for each class?

Shall she teach geography and history together in Grades III and IV?

Shall she teach geography and history for important facts or for pleasure with an occasional test?

Wants *interesting* books in history.

Problem method required but children cannot understand what they read.

Reports no method of teaching history or geography; wants one.

Wants incentives for class of girls.

Wants suitable geography textbook for fourth grade because books supplied are too hard.

LITERATURE

Finds no foundation for appreciation and no home interest.

Wants more information about teaching junior high school literature.

Wants good book for sixth grade.

ARITHMETIC

Pupil willing but subject beyond him.

How to introduce entirely new subject in fractions by working from known to unknown.

Should arithmetic informally taught have test for check-up?

Only one child with "mathematical" mind; others about a grade behind; can't solve problems because they can't get question; can't analyze.

Wants material to help children to be accurate.

Asks how to get children to think out problems.

Can't teach long division so that children understand.

Can't teach uneven division and problems involving division.

Can't get children to reason.

LANGUAGE

How to develop sentence sense in child who recognizes printed sentence but cannot speak or write one.

How to develop sentence sense in language and reading in Grades III and IV.

Wants suggestions in fifth-grade language.

Can't find suitable stories for language. All material is beyond experience of children.

Wants material for language work in Grade IV.

TECHNIQUE

Class of children retarded one year; very silly on slight provocation but respond to correction; all have great difficulty with English; hear none at home.

Wants help in habit-training.

Can project work be done in a rural school if teacher cannot supervise?

Finds discipline hard; previous teacher failed; children compelled to attend.

Problem: temperamental child who will not keep attention fixed.

Wants help in teaching children to reason; children expect too much help.

Bothered by discipline in general.

Wants seat work for Grade I.

Mentally deficient children: (1) Girl in Grade II: no aptitude for anything but is sometimes the only one to give correct answer. Cannot finish a sentence in ordinary conversation without great difficulty. (2) Girl cannot stand either praise or blame; very careless; tends to rush everything; apparently lacks proper rest and sleep.

How to use to best advantage short-time periods in a rural school. Can projects be carried out under such conditions?

Children thus far two years in each grade; have learned nothing this year; what to do.

How to carry on discussion profitably with a few.

How to punish profitably.

Boy good in arithmetic; can do nothing in history or geography; will probably leave school this year; what to do.

Extreme inferiority complex plus boastfulness.

Extremely spoiled child.

Backward girl with St. Vitus dance; two years retarded; four years too old for grade.

Mentally deficient child: shall he get what he can or be drilled until he can do something right?

Wants a discussion of seat work for backward children.

Discipline: boy, very small, twelve years old, sixth grade, in good health, previously sickly, does as he pleases at home, lazy at school, starts fights.

Has two first-grade boys repeating; how much attention?

Subnormal pupils: attentive but can't learn even with individual instruction; they hold back the bright ones; what to do.

A backward fifth grade: reports that their first two years were wasted; how to make them eager to learn.

Retarded girl with speech impediment: twelve years old, third grade.

Boy with much promise in drawing, not passing in any other subject.

Pupils in school under compulsion: stubborn and quarrelsome.

Thinks outside club work cannot be carried on because children live at distance from school.

Wants to know *when* to teach subject matter of grade.

Has two repeaters, first grade, whom she cannot interest for more than ten minutes at a time.

Wants seat work.

Backward girl: does good handwork; can't read; after half-hour drill one night on "it" family could not recognize "it" the next day; writes, "The day is to my mother day to."

Has class of backward children who "hate to appear intelligent"; will be grateful for information about backward children.

Backward children her great difficulty.

Discipline difficult on account of lack of interest of children.

Has a stuttering child who will not recite because of presence of class.

Has older boys who have been "cussing" and smoking. "They still cuss when I'm not around."

INCREASE IN NUMBER OF MEN IN EDUCATIONAL POSITIONS

Two articles have recently appeared citing facts which show that public schools are employing more men than they did a few years ago. The first is from the *New York Sun* and is in part as follows:

Men are slowly—very slowly—returning to the teaching corps of the public-school system, it is disclosed in the annual report of Superintendent of

Schools William J. O'Shea. Not only is the number of men increasing, but the ratio of men to women teachers also is gaining.

For the school year 1927 men constituted 14.1 per cent of the teaching staff. The year before the percentage was 13.8 per cent as against 13.4 per cent in 1925 and 12.9 per cent in 1924. Between 1920 and 1924 there was little increase, the gain over the four-year period having been 0.7 per cent.

The number of men and women in the school system for the last four years is shown in the following table.

Year	Men	Women
1924	3,535	23,806
1925	3,821	24,716
1926	4,072	25,446
1927	4,282	26,152

The preponderance of women teachers is strongest in the elementary schools. Of 20,722 class teaching positions in this branch of the service last year, only 1,094 were filled by men. Elementary-school principalships were held by 211 men and 209 women. There were 84 men assistants to principals as against 524 women.

In the other branches of the service the number of men and women class teachers, exclusive of clerks, laboratory assistants, principals, and other supervisors, was as follows:

	Men	Women
Junior high	485	2,112
Senior high	1,674	2,562
Training school:		
Theory	28	124
Model	8	64
Vocational	96	73
Truant	8	8

In the higher positions, however, the men were much more numerous. There were five men junior high school principals as against only one woman and thirty-three men senior high school principals and three women. Two of the three training-school principals were men. Of the vocational schools, three were headed by men and one by a woman, while the truant, or parental school, was headed by a man. In the senior high schools there were 279 men first assistants and only 102 women.

It is when all these positions are added to the class-teaching positions that the percentage of men in the teaching corps mounts up to 14.1. The percentage of men who actually teach the children is considerably less.

The second article, published in the *United States Daily*, is as follows:

Teaching is becoming sufficiently well paid to attract men in competition with other callings, according to the Bureau of Education, Department of the Interior. The Bureau points out that, following a decrease in the number of men in the profession for sixty years, increased numbers are returning to the occupation. The full text of the Bureau's statement follows.

"The Department of the Interior finds that school-teaching in the United States as a calling for men, which had steadily decreased for sixty years, seems to have turned about of late and to be calling considerably increased numbers of men back to the classroom. Of the 1,000,000 people engaged in teaching in 1926, for example, 17 per cent were men. Only as long ago as 1920 but 14 per cent of those teaching were men.

"Until 1920 there had been a constant decrease for two generations in the number of male teachers in the public schools of the United States. From this fact the conclusion might have been drawn that the teaching profession did not appeal to men as it formerly did. The Bureau of Education, which compiled these figures, holds that the small salaries paid to teachers in general and the larger opportunities for advancement afforded by commercial and industrial pursuits were perhaps the real explanation of the situation. In addition to this has been the fact that women have been seeking new opportunity to work and that school-teaching has offered them a favorable field.

"A bulletin of the United States Bureau of Education, recently published, shows that the percentage of male teachers in the public schools of the United States in 1880 was 43; in 1890, 34.5; in 1900, 30; in 1910, 21; in 1920 it had fallen to 14, while in 1926 it was 17.

"Several of the states showed a much greater decrease than this general average. Arkansas, for instance, which had 75.6 per cent male teachers in 1870, had 32.4 per cent in 1926. Idaho in the same period decreased from 64 to 22 per cent.

"In the days of the grandfathers of the present generation, teaching was largely in the hands of men. The country school rarely knew the woman teacher. Gradually all that changed. The recent tendency toward more men teachers is doubtless due to the fact that salaries of teachers have been materially increased in the past decade. Teaching is becoming sufficiently well paid to offer a career for men that will compete with other callings."

"GEOGRAPHIC NEWS BULLETINS"

Teachers can secure from the National Geographic Society, Washington, D.C., weekly bulletins containing pictures and news items of current interest. These bulletins are entitled *Geographic News Bulletins;* the price is twenty-five cents for thirty issues.

IS THE JUNIOR HIGH SCHOOL TO BE A SEPARATE SCHOOL?

There is in England at the present time vigorous discussion of the problem of properly placing pupils who are in the early stages of adolescence. The report on secondary education published in 1926 by the Board of Education of England and known as the "Hadow report" recommended a transfer of pupils more than eleven years of age from the elementary school, or the "primary school," as it is called in England, to special schools of secondary grade. The questions which this recommendation and earlier recommendations of like import raise are very much like the questions which were much discussed in this country fifteen years ago when the junior high school first made its appearance.

Objections to any educational readjustment are so likely to be colored by the personal interests of individuals that it is enlightening to study problems of reorganization from the outsider's point of view. It is therefore proper that American readers should give attention to a statement in the London *Times Educational Supplement* which presents fully the arguments for and against the transfer of pupils at about twelve years of age from the jurisdiction of the elementary school to that of another educational institution.

Much difference of opinion is being expressed on the question whether children of "eleven plus" should be transferred to separate schools for their post-primary education or be retained in the existing schools for a reorganized course. The Hadow report emphasized the desirability of a definite break between the two epochs while not excluding the second possibility, and for a time this suggestion received much support from different parties.

In February the president of the London Teachers' Association advocated "secondary-school conditions" for all children over eleven in the elementary schools, especially mentioning improvements in staffing, in equipment, and in the provision of playing fields, and he claimed that there is within the elementary schools "a lively diversity, a wide range of experiment, and a great elasticity of method," which would enable the teachers, with improved material conditions, to organize secondary departments in the elementary schools. The National Union of Teachers, at its recent conference, put forward a resolution which declared a general agreement with the Hadow report and supported the principle that a general system of secondary education, diversified in type, should be established for all normal children of secondary-school age. Nothing in the resolution or in Mr. Mander's speech revealed any preference for transferring or retaining children of eleven plus, but an amendment declaring that, where adequate provision existed or could conveniently be made for giving effect

to advanced instruction in the primary schools, this solution was preferable to transference, was accepted by Mr. Mander and was carried. The teachers, therefore, are moving toward the view that reorganization within the elementary school is better than the transference of children to separate schools.

It can be said with perfect fairness that many teachers at the present time are uneasy about their position if all children are to be transferred at the age of eleven plus to a new institution. Mr. Mander, both at Cambridge and elsewhere, has laid some stress on the plea that no teacher should suffer financially or professionally by reason of any reorganization, and the plea is a reasonable one, but it is not a valid argument for preferring one solution rather than another. How far it has influenced the opinion of the teachers cannot be determined, but that it is a factor seems to be proved by the increasing emphasis that is being laid on it. It is playing a greater part in discussions than formerly, and it is less easy now to ignore it than it was in 1918, when the suggestion for transference first came into prominence.

The educational principle involved—what is best for the child—is not easy to determine. On the one side we are told that a complete break means a loss of time, a lack of continuity, a mental disturbance, and that by the withdrawal of the older pupils the juniors will be deprived of valuable personal experience just as the seniors will be deprived of opportunities for leading and controlling younger children. The break, it is said, will disturb the pupil's loyalties; he will belong to no institution for any length of time and consequently will not feel specially identified with any one of them. The primary school will be truncated and, left rootless and headless, will be but a brief halting-place between the infant school and the secondary school, achieving nothing in itself and overshadowed by the secondary school, which will alone see the results of the process and claim the credit for them. If these arguments are too theoretical and speculative for us, we are invited to consider the Scottish system, where for centuries the primary schools educated children from infancy to maturity, retaining their older scholars until they had passed the entrance examination to the university, and where the village dominie could teach both the elements of reading and the classics. Nor has this all-embracing system disappeared; the child can still receive his primary and secondary education in the same institution and can move along, without any break, from his first simple lessons to his post-matriculation course.

But, however many are the arguments against transference, there is a case for it which ought to be put. It is based, in the final analysis, on the doubt whether the English primary schools can handle adolescents as successfully as a new type of institution which deliberately cuts itself off from the elementary-school tradition. This may seem a hard saying, but it is uttered with no intention of minimizing the importance and value of the work of the elementary school. We can admit that within the elementary schools there is "a lively diversity, a wide range of experiment, and a great elasticity of method" and yet doubt whether they are the institutions for adolescence. We can admit that

Scotland has provided solid achievement in the argument against transference and still doubt whether the argument is valid for England. We must examine what we mean by the English elementary-school "tradition."

The relevant facts come from history. The English elementary school was born in poverty and incompetence. It was the cheap provision against the appalling evils of the Industrial Revolution, and its aim was to rescue for the brief period of infancy the victims of a social disaster. Its best advocates based their support less on its educational importance than on its rescue work—it saved children from the factory, the mine, and the slum and disciplined them, in a revolutionary age, with ideas of behavior and order. Against economic pressure it could only retain them for a few years, and by the age of ten the vast majority had entered work; nor were there many advocates for any extension of schooling. Hence the experience of the schools was, for a long time, confined to children of pre-adolescent age, and the methods that were evolved came from that experience.

The critic may object that these were the conditions of time past and that we have long since got rid of them. But we must remember that they persisted throughout the whole of the nineteenth century. By the Act of 1876, which first defined the period of education, a child could leave school at the age of ten provided he had passed Standard IV, or had made 250 attendances for each of five years. For factory children an alternative of half-time attendance was allowed. The Acts of 1880 gave power to school boards to make early withdrawal less easy, but the possibility of leaving at the age of ten still continued. It was not until 1893 that it was impossible for a child to leave school before the age of eleven, and in 1899 this was raised to twelve. Thus, until the end of the nineteenth century, elementary education meant almost entirely the education of the pre-adolescent, and the conditions in England were entirely different from those in Scotland. The curriculum, the methods of teaching, the discipline, and the general atmosphere were shaped by the recognition that the school dealt with children below the age of ten or eleven.

To this restriction of age must be added the large class. If Lancaster did not convince his successors that a single schoolmaster was able to teach a thousand scholars, the large class has persisted in spite of the groans that have gone up for more than a century from despairing teachers. Probably the technique of the elementary school has been determined by the size of the classes more than by any other single factor. Discipline, routine, class management, relationship of pupil to teacher—all these are determined to a large extent by the numbers involved, and methods were devised which became a part of the established order. Now, while we have abolished the excessively large classes which existed a generation ago, we still allow classes of a size big enough to continue the technique of an older day. There are still some classes with more than sixty scholars and many with more than fifty, and anybody who visits a variety of schools at the present time will be reminded that a large number of teachers in them have changed but little in their methods of class management as compared

with the teachers of a former day. They teach with more variety of method; they use many new devices; they are better informed, but they handle their classes pretty much as did their predecessors.

It is on these two points that we may define the elementary-school tradition. It is a mode of teaching young scholars in large groups, and it is intrenched in the elementary schools because of their past history. What the opponents of a definite break at the age of eleven plus ask us to believe is that by increasing the staff, by reducing the size of the classes, by providing more apparatus for practical work and more books, and by securing more playing fields, the elementary school will show that its powers of renewal and extension are equal to the task of dealing with adolescence on a national scale. That is the point at issue, and that is the point which has not been proved by either side.

Psychologists have made clear to us that there is a significant gulf between adolescence and the preceding period of boyhood and girlhood. The transition from the one to the other means that there is a lack of continuity, a mental disturbance, and even, from one point of view, a loss of time. These things are what the opponents of transference tell us should be avoided, but they cannot be avoided, for Nature has fixed them as a natural stage of development. The boy dies, and the youth rises, phoenix-like, from the flames. New visions, new hopes, new interests, new values of life are created. The primary school has served its turn, but it must be replaced now by something different, not something better, for there need be no comparison between institutions serving different ends, and the primary school, even if it must give up the scholar at eleven or twelve, need not consider that its importance in the world is thereby diminished. It has a task that is significant enough and honorable enough to make it rank equal with any other institution.

The case for separation, then, is that the English elementary school has been fashioned for the pre-adolescent stage, that older children have been attached to it only in fairly recent years, and that the psychological factors involved suggest that the two groups of scholars require entirely different treatment. The thesis cannot be proved or disproved, and only the very dubious argument by analogy is available. Consider the case of the infant schools, which have improved so enormously since the realization that infancy was a stage of growth different from all other stages and requiring different methods to suit the characteristics of infancy. If infant schools had not been organized as separate units but had been controlled by the teachers of upper departments, in what condition would infant schools now be? On the same analogy, boyhood (and girlhood) must be studied and its needs met whatever adolescence may reveal.

EDUCATION AND EMPLOYMENT

The following pointed comments are part of a circular issued by the Public Education Association of the City of New York.

The National Association of Manufacturers has published a national program on education and employment which has created quite a stir in various parts of the country. Despite the presence of the word "education" in the title, it is difficult for those who are familiar with modern developments in school practice to regard this program as dealing constructively with that subject. In this program, which is designed for "the further protection of employed children fourteen and fifteen years of age," it is specifically recommended "to release" from school attendance "individuals incapable of further education."

Now what does that mean? Does it mean that the members of the manufacturers' association really believe that these children of fourteen or fifteen years of age are incapable of *any* type of further education? It seems impossible that any intelligent person could believe that in this day and generation. Or does it mean that the drafters of this program were uninformed of modern educational trends and had in mind only the limitations peculiar to the academic content of the traditional school program? The latter must be the answer; the former would be incredible.

It is inconceivable that anyone should believe that even a very dull child of fourteen years of age is incapable of further education along *some* lines. The problem is to find out what those lines are and to provide opportunities which will enhance the most wholesome development. Can this best be done in the school or in industry? Is the factory the ideal educational institution for the problem child? Who is more capable of discovering capacities and of developing them to the best interests of the child and society? Is it the employer, who must of necessity regard his personnel as a means toward the end of production and who, with rare exceptions, loses sight of the welfare of the individual employee of low-grade ability in meeting the inevitable economic demands of business competition? Or is it the educator, who seeks to understand child needs, to develop personality, and to advance social standards under conditions in which the sacrificial demands of profits and dividends are absent? The average employer is primarily interested in utilizing the child "as is" in extremely limited fields of action for the furtherance of business success; the average educator is primarily interested in what the child is capable of becoming in manifold ways for the child's own sake.

While the present technique of the school in dealing adequately with the needs of all types of children is far from perfect, the advancement that has been made in recent years is sufficiently striking to indicate that the school is the child's "best bet" for personal development.

EXPERIMENTS WITH REGARD TO VENTILATION

A few years ago the New York Commission on Ventilation, which had made a study of ventilation of public buildings, reached the astonishing conclusion that artificial systems of forced ventilation are by no means as necessary or as effective as they were thought

to be. As a result of experiments made in Syracuse, New York, and elsewhere last year, the commission came to the conclusion that a large volume of rapidly moving air is deleterious and that open-window ventilation is better than an artificial system of ventilation. An extensive experiment is now to be tried in New York City. The *New York Sun* describes the project as follows:

The New York Commission on Ventilation is to undertake a thorough experimental study of school ventilation in four New York City schools. The nature of the experiment will be to determine whether or not artificial ventilating systems are necessary or result in improved health of school children and in better school work.

The commission will carry on the work under the financial auspices of the Milbank Memorial Fund, and its proposal has been approved by Acting Superintendent of Schools Harold G. Campbell. Mr. Campbell has recommended to the building and sites committee of the Board of Education full approval of the experiment and co-operation with the commission.

In a letter addressed to the building committee of the board, Mr. Campbell described the proposed experiment as follows:

"In sixteen rooms in Public School 116, Manhattan, comparison is to be made of the effects on the health of the children of the present univent system working at a normal rate (thirty cubic feet of air per child per minute) and the univent system working at a reduced rate (fifteen cubic feet of air per child per minute).

"In Public School 104, Manhattan, it is proposed to make a comparison between the univent system at a reduced rate (fifteen cubic feet of air per child per minute) and window gravity ventilation (ventilation without a mechanical draft).

"In two other schools to be selected the same experiments are to be carried on so that results in different neighborhoods may be compared.

"The commission undertakes the responsibility for all changes and for all necessary installations and for the restoration of the classrooms to their condition previous to the experiment. The necessary changes will involve reducing the present univent system in some of the rooms of Public School 116, Manhattan, to a capacity of fifteen cubic feet of air per child per minute. In Public School 104, Manhattan, the univent system will have to be installed in nine rooms. The commission undertakes to have all of this work done.

"The contractor who will furnish the univents to the commission for this experimenting has requested the commission to ask that he be permitted to use the univent ventilators employed in this experiment in fulfilling future contracts with the Board of Education for ventilation in new buildings.

"I believe these experiments will be of great value to us in planning the ventilation of new buildings. Some of the members of the commission and its

executive secretary have had extensive experience in the field of school ventilation, and I am sure that the work will be conducted along scientific lines. Superintendent of School Buildings Walter C. Martin is familiar with the details of the contemplated experiment and approves of the plan. I therefore recommend that your committee approve this experiment and authorize the necessary changes under the conditions stated above."

In all of the schools, Mr. Campbell added, classes will be chosen which are as nearly homogeneous as possible. In choosing classes, age, grade, health, I.Q., and home environment will be considered so as to make the results of the experiment as accurate as possible.

Some members of the commission are known to favor 100 per cent mechanical ventilation; others favor partial artificial circulation of the air; and still others maintain that a natural gravitation ventilation is best. It is to determine which of these three theories is correct that the experiment will be conducted. Its results may have a far-reaching effect upon the construction of the city's new school buildings of the future.

LIBRARIES SUPPORTED BY PUBLIC FUNDS

The following statement, issued by the Bureau of Education, was published in the *United States Daily*.

In Czechoslovakia all communities are required by law to maintain public libraries. This nation, which grew out of the great war, is the first in the world thus to make the support of libraries mandatory.

Under the Czechoslovakian law every town having ten thousand inhabitants must appoint a librarian. This officer must have completed secondary school and had a one-year course for librarians. In smaller communities, a teacher who has acquired the librarian's technique by taking a month's training in library work is appointed in most cases as librarian.

The ministry of education sends a practical handbook on administering small libraries to the librarians in small parishes, and the inspection of all libraries is performed by instructors of the ministry.

The law provides that a fifth of all books in every library must have instructive content. Greater towns are obliged to open a reading-room of journals at the library, and the greatest towns also must have a local public library of musical compositions.

In the year 1920, in Czechoslovakia, 3,400 private libraries had 1,650,000 books; in the year 1926, 16,200 public libraries had more than 5,000,000 books.

Thus, there has been provided one library for each 894 inhabitants, 44 books for each 100 persons. In the American public libraries there are 60 books for every 100 persons.

These libraries in Czechoslovakia are financed by the communities and the state, the communities paying 90 per cent, and the state 10 per cent, of the cost.

WHY ARE MORE BOYS THAN GIRLS RETARDED IN SCHOOL? I

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It has often been observed that boys are more frequently retarded in school than are girls, although it is commonly conceded that there are no differences in average general intelligence. Two explanations have been offered. The first is that girls are more docile than are boys and give less trouble. The second is that more boys than girls are subnormal mentally because there is a wider distribution of intelligence among boys and consequently more individuals occur at the low extreme as well as at the high extreme.

The study here reported was undertaken to determine whether an analysis of the psychological records of retarded children would furnish any information. The Educational Measurements Bureau of the New York State Department of Education has conducted individual psychological examinations in many of the smaller cities and villages of the state for a number of years. The greater part of the examining has been for the purpose of selecting mentally retarded pupils for special classes, and most of the children examined have been seriously retarded in school progress.

The records of 749 pupils examined over a three-year period have been analyzed. The boys' records comprise almost 70 per cent of the total; that is, the boys outnumber the girls more than two to one. Between 63 per cent and 74 per cent of the pupils selected from every grade from the first through the fifth were boys. The grade distribution is shown in Table I.

The pupils examined were selected for examination by the local school authorities as the most likely candidates for special classes. A few children frankly recognized as not subnormal but problem children are included, but, on the whole, the records are those of children regarded by the local school authorities as most in need of special education because of their lack of school progress. In the selection the point emphasized was lack of school progress so that

the cases should not be unduly overweighted by disciplinary problems except in so far as the latter involved also distinct grade retardation. The basis of selection was usually age-grade status combined with teachers' judgments and sometimes results of group-tests.

TABLE I

DISTRIBUTION OF 749 RETARDED PUPILS ON THE BASIS OF GRADE AND SEX

Grade	Number of Boys	Number of Girls	Percentage of Boys
I	100	59	62.9
II	98	37	72.6
III	96	54	64.0
IV	92	37	71.3
V	40	14	74.1
Special classes*	86	36	70.5
Total	512	237	68.4

* Already segregated at the time of examination.

TABLE II

SEX DIFFERENCES IN OVER-AGENESS FOR GRADE

	Boys		Girls		Percentage of Girls Minus Percentage of Boys
	Number	Per Cent	Number	Per Cent	
At age or under-age	81	19.0	42	20.9	+1.9
One year over-age	88	20.7	34	16.9	−3.8*
Two years over-age	107	25.1	43	21.4	−3.7
Three years over-age	79	18.5	43	21.4	+2.9
Four or more years over-age	71	16.7	39	19.4	+2.7

* P.E. = 7.73.

The first question that arises is whether, since many more boys were selected, there is any gross difference in the amount of over-ageness. Table II indicates that the answer is negative; the boys and the girls examined are about equally over-age for their grades. The largest difference is less than half its probable error, and neither boys nor girls are consistently more over-age in all grades.

The boys and the girls are therefore comparable in degree of over-ageness and equally recognizable by teachers and principals as to the problem they present. The problem is to discover what differences, if any, exist between the boys and the girls that will explain the greater frequency of the boys.

The records of the children examined by the bureau ordinarily include data secured by means of the Stanford-Binet scale (complete test), a performance scale consisting of six different types of tests,[1] and a school-history blank filled out by the teacher. The blank is as follows:

SCHOOL AND PERSONAL HISTORY BLANK

Name _____ Date _____
Place _____ School _____ Grade _____
Address _____ Sex _____ Color _____ Age _____
Birthplace _____ Date of birth _____ Parent's name _____
Age at entering school _____ Grades repeated _____
Is he doing satisfactory work in present grade? _____ Communities in which child has attended school _____
Age and causes of any prolonged absences _____
_____
Daily attendance regular or irregular _____ If irregular, cause _____
_____

School work (*Place check on part of line where you estimate child's position*)

Industry

Marked persistence	Ordinary effort	Extreme laziness

Attention

Excellent concentration when studying	Ordinary concentration	Extreme inability to put attention on task

Interest

Marked indifference to work	Ordinary degree of interest in study. Needs stimulation	Absorbed and genuine interest in work

Memory

Excellent memory	Average ability to retain lesson	Marked inability to remember facts apparently learned

Comprehension

Complete inability to comprehend work of the difficulty of his grade	Slow to grasp but understands with effort	Follows explanation with ordinary ease	Marked ability to anticipate explanation, to grasp work of greater difficulty

[1] The performance scale used is made up of seven tests, six of them well-known tests and the seventh a new one devised by W. W. Coxe and E. L. Cornell. The methods of scoring most of the tests have been radically changed, and the performance scale has been standardized on school children. It is in process of preparation for publication. The tests used are (1) manikin-profile, (2) Kohs' Block Design (selected designs), (3) picture-arrangement (new test), (4) digit-symbol, (5) memory for designs, (6) cube construction, and (7) Healy Pictorial Completion II. The scale as used usually consists of six tests, Test 3 or Test 7 being omitted.

Mention any special aptitudes or disabilities or subjects or activities in which child shows particular interest or lack of interest _____

_____

Date of last physical examination _____ Defects found _____

_____

Personality (*Underline the words that describe the child*)

Overquiet, quiet, talkative, active, overactive, restless, energetic, leader, ringleader.

Impulsive, nervous, excitable, easily discouraged, hot-tempered, irritable, "goes to pieces easily."

Cheerful, depressed, changeable, stolid.

Easily led, suggestible, shy, timid, unambitious, lacking self-confidence, self-conscious.

Selfish, conceited, self-centered, overconfident, unable to conform to group.

Distant, seclusive, oversensitive, suspicious, unsociable, evasive.

Social, friendly, responsive, popular, adaptable, quarrelsome, unfriendly.

Conduct. Describe any abnormal tendencies shown by child such as lying, stealing, bullying, truancy, outbursts of temper, abnormal sex tendencies, abnormal fear, antisocial activities.

_____

_____

Personal history (*If further information about family or child's development can be given, attach extra sheet*)

Birthplace of father _____ of mother _____

Occupation of father _____ of mother _____

If parents are dead, with whom is child living? _____

Language spoken at home _____ Do parents read and write English? _____ native language? _____ General repute of family as to economic and moral status _____

Peculiarities in environment or family conditions which may be detrimental to child _____

_____

Names and ages of brothers and sisters and school grades of those in school

_____

(Signed) _____ History obtained from _____

Position

From the records of the children a number of comparisons can be made between the boys and the girls. Those chosen as possibly throwing light on the question of specific abilities, interests, or traits of personality that might explain the greater frequency of retardation among the boys are the following: (1) differences in age-grade status of retarded boys and girls, (2) differences in mental age and

I.Q.'s as determined by the Stanford-Binet scale, (3) differences in mental age as determined by the performance scale, (4) differences as determined by specific tests of the Stanford-Binet scale, (5) differences in personality traits, and (6) differences in school attitudes. The records of 749 children were analyzed for these six items. As the data are not complete for all the children, the number of cases in the various comparisons may vary considerably.

1. *Differences in age-grade status.*—Table III shows the median chronological ages of the retarded boys and girls examined in each grade and the differences between the grade medians. The reliability of these differences cannot be conveniently computed from the

TABLE III

SEX DIFFERENCES IN AGE-GRADE STATUS

GRADE	NUMBER		MEDIAN AGE IN YEARS AND MONTHS		QUARTILE DEVIATION		NUMBER OF MONTHS BOYS ARE YOUNGER
	Boys	Girls	Boys	Girls	Boys	Girls	
I	100	59	8–6	8–6	1.11	1.21	0*
II	98	37	10–0	10–4	.89	1.26	4
III	96	54	11–11	12–1	.91	1.07	2
IV	92	37	13–0	13–5	1.15	.96	5
V	40	14	13–10	13–7	.90	.73	−3†
Special classes	86	36	12–0	12–7	1.25	1.36	7‡

* Difference in means, −1 month.
† Difference in means, −1 month.
‡ Difference in means, 4 months (P.E. = ±.23).

medians and the quartile deviations, but it is evident that the differences are too small to be statistically reliable. The means were computed in three cases; in two cases the differences were reduced, and in the third case the difference was increased from zero to one month. The largest difference was found in the special classes, the difference being seven months between the medians and four months between the means. The probable error of the latter difference is ±22.6. However, while the differences are small as compared with their probable errors, it is worth noting that all but one show the boys to be slightly younger than the girls.

2. *Differences in mental age and I.Q.'s as determined by the Stanford-Binet scale.*—Table IV shows the difference for each grade in median mental age as determined by the Stanford-Binet scale. The

boys are older mentally than the girls in every grade except the fifth. Calculation of the means and the probable errors of the differences in two instances shows that the differences are not statistically significant. It may be noted that the boys are more variable than the girls as judged by the quartile deviations.

TABLE IV

SEX DIFFERENCES IN MENTAL AGE AS DETERMINED BY THE STANFORD-BINET SCALE

GRADE	NUMBER		MEDIAN MENTAL AGE IN YEARS AND MONTHS		QUARTILE DEVIATION		NUMBER OF MONTHS BOYS ARE OLDER
	Boys	Girls	Boys	Girls	Boys	Girls	
I	96	57	5–10	5– 8	.83	.75	2
II	97	36	7– 7	7– 1	.79	.62	6*
III	93	52	8– 2	7– 8	.70	.63	6
IV	90	37	9– 2	8–10	.66	.60	4
V	40	13	9– 7	9–10	.65	.87	−3
Special classes	86	35	8– 2	7– 5	1.14	.55	9†

* Difference in means, 6 months (P.E. = ± 12).
† Difference in means, 5 months (P.E. = ± 18).

TABLE V

SEX DIFFERENCES IN I.Q.

GRADE	NUMBER		MEDIAN I.Q.		QUARTILE DEVIATION		NUMBER OF POINTS BOYS ARE HIGHER
	Boys	Girls	Boys	Girls	Boys	Girls	
I	95	57	71	64	12.5	11.1	7*
II	97	36	75	71	9.3	9.0	4
III	93	52	69	67	8.9	7.3	2
IV	92	37	72	66	8.4	8.2	6
V	40	13	68	73	9.8	3.2	−5
Special classes	86	34	68	63	8.2	12.2	5†

* Difference in means, 6 months (P.E. = ± 5.175).
† Difference in means, 5 months (P.E. = ± 4.103).

Table V shows the differences in I.Q.'s. The differences are again in the same direction; in every grade except the fifth the boys have a slightly higher median I.Q. than do the girls. In the two cases where the means and the probable errors of their differences were calculated, the differences are not statistically reliable.

3. *Differences in mental age as determined by the performance scale.*—Table VI shows the differences in mental age as measured

by the performance scale. The performance scale shows the same differences between the boys and the girls as were brought out in Tables III, IV, and V. The boys are somewhat older mentally than the girls in every grade except the fifth, but the differences are not larger than their probable errors.

The differences may have only the same significance as that of the differences in the case of the mental ages as determined by the Stanford-Binet scale, but there is another comparison possible here; that is, the boys may be relatively more capable than the girls on the performance scale as compared with their records on the Stan-

TABLE VI

SEX DIFFERENCES IN MENTAL AGE AS MEASURED BY THE PERFORMANCE SCALE

GRADE	NUMBER		MEDIAN MENTAL AGE IN YEARS AND MONTHS		QUARTILE DEVIATION		NUMBER OF MONTHS BOYS ARE OLDER
	Boys	Girls	Boys	Girls	Boys	Girls	
I	40	27	6–10	6– 4	1.33	1.01	6*
II	48	17	8– 4	7–10	.97	.95	6
III	46	28	9– 5	8– 5	1.00	1.59	12
IV	43	12	10– 5	8–10	.87	.74	19†
V	15	8	10– 7	11– 4	1.04	.88	– 9
Special classes	66	30	8–10	7– 7	1.48	1.39	15‡

* Difference in means, 5 months (P.E. = ± 28).
† Difference in means, 19 months (P.E. = ± 14).
‡ Difference in means, 18 months (P.E. = ± 34).

ford-Binet scale. To determine whether this is true, Table VII has been prepared. This table shows the differences between the median mental ages of the boys and of the girls in each grade as determined by the Stanford-Binet scale and by the performance scale. Except in Grades II and V the boys show a greater difference between the two ratings than do the girls. However, unselected boys normally rate a little higher than do unselected girls, and the differences are not greater than would be expected.

The findings so far may be summarized as follows:

1. A little more than twice as many boys as girls were selected for examination because of school retardation. The boys and the girls are about equally distributed as to amount of over-ageness.

2. The differences in chronological age, in mental age as deter-

mined by the Stanford-Binet scale, in I.Q.'s, and in mental age as determined by the performance scale are not large enough to be statistically reliable, but they are consistent. In all grades except the fifth the boys are a little younger and a little higher in mental age as determined by the Stanford-Binet scale, in I.Q., and in rating on the performance scale. The fifth grade is an exception, perhaps because of some special selection among the small number of fifth-grade girls examined.[1]

TABLE VII

DIFFERENCES BETWEEN MEDIAN MENTAL AGES AS DETERMINED BY THE STANFORD-BINET SCALE AND BY THE PERFORMANCE SCALE

GRADE	NUMBER OF MONTHS PERFORMANCE-SCALE MEDIAN IS HIGHER THAN STANFORD-BINET MEDIAN		NUMBER OF MONTHS DIFFERENCE IS GREATER FOR BOYS
	Boys	Girls	
I	12	8	4
II	9	9	0
III	15	9	6
IV	15	0	15
V	12	18	− 6
Special classes	8*	2†	6‡

* Mean, 7.
† Mean, −6.
‡ Difference in means, 13 months.

3. The variation in mental ability (quartile deviation in Tables IV, V, and VI) is in most cases greater among the boys.

What hypothesis best explains what has been found so far? If it is conceded that the average intelligence of boys and girls in general is the same, the distribution of intelligence may or may not be the same.

First, suppose that intelligence is distributed about the same average for the boys as for the girls but has a wider variation among

[1] It may be noted that the number of fifth-grade pupils examined is smaller than the number of pupils examined in the other grades. The explanation lies in the fact that the examining was usually done under pressure of time, and, as in most cases the pressing problem was whether or not the child should be in a special class, a large number of fifth-grade children were eliminated without being examined because they were obviously not candidates for special classes. Fifth-grade pupils were rarely examined without special request, and this fact may have served as a special mode of selection.

the boys; that is, the curves for the two sexes have the same central tendency, but the boys' curve is flatter, as in Figure 1.

If all boys and girls who are equally subnormal are selected, as indicated by the part of the curve to the left of the vertical line, there will be more boys than girls. So far, this fits the facts. However, on this hypothesis, a comparison of the percentages of the retarded boys and girls at the various I.Q. levels should show relatively more boys than girls the lower the I.Q. level; that is, the distribution of I.Q.'s should show a higher percentage of boys than of girls at the lower end. That this is not the case is shown in Figure 2. It is evident that there is a larger percentage of low-grade girls than of low-grade boys although the difference is not marked.

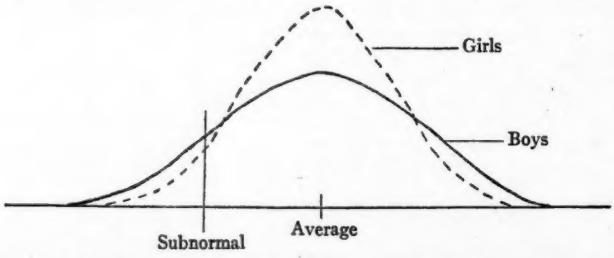

FIG. 1.—Hypothetical distribution of intelligence of boys and girls on the assumption that they have the same average intelligence but that the boys are more variable.

As the second hypothesis, suppose that intelligence generally speaking has not only the same average but the same variability, that is, that the distribution curves for the boys and the girls coincide. There are, then, two possible explanations of the greater number of boys in the retarded group. (1) There might be simply a wider selection of intelligence among the boys, which would mean that the boys fail at a level nearer the average than do the girls. The consistency of the data would fit this explanation, but the statistical unreliability would make it inconclusive. (2) It might be that the cases represent the same intelligence range but that there are traits other than intelligence more important in determining school failure. It might be that there is an *unselected* group of boys below a certain I.Q. level but a group of girls *selected* by virtue of certain

traits other than intelligence that they possess in common with the boys, while other girls of the same intelligence level but possessing different traits have escaped retardation.

A comparison of the boys and the girls with respect to factors other than general intelligence may help to decide between these two possibilities. If the boys and the girls are found essentially alike with respect to these other factors, the latter explanation is more

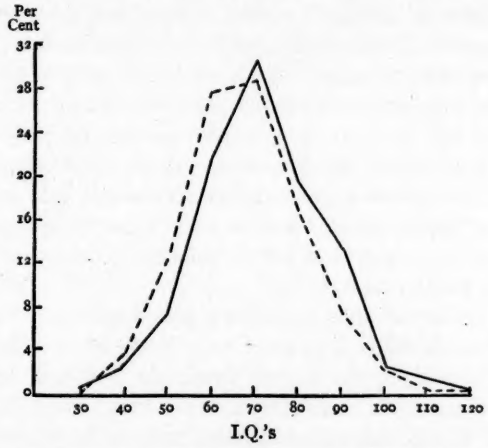

FIG. 2.—Difference between retarded boys and retarded girls in distribution of I.Q.'s (boys, solid line; girls, broken line).

probable; if differences are found, the former explanation is more probable.

Part II of this article will therefore consider the differences between the retarded boys and girls in various characteristics. On the one hand, the differences may be intellectual; there may be differences in specific abilities that make learning easier or harder. For example, if the girls in general have better rote memories, or if they are superior in their ability to express themselves linguistically, they might do better in school work even with the same degree of general intelligence. On the other hand, there may be differences in attitude toward school work or in personality that produce different results in school progress.

[*To be concluded*]

RECOGNITION OF FATIGUE IN THE SCHOOL CHILD

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Since the term "fatigue" is often misused and since there seems to exist a great difference of opinion as to just what it means, it may be desirable to define "chronic fatigue." It is not "fatigability," which may appear as one of the many symptoms of organic disease; nor is it acute fatigue, which can be artificially produced in normal children and which is the inevitable result of an excessive amount of work. It is a symptom complex, which may be primary but is often secondary, in which the signs and symptoms of subefficiency are usually general and in which more than one organ and one system are involved.

The symptoms of fatigue may be physical, mental, or emotional. They are varied, differing at times even in the same individual. In some children the physical may predominate; in others, the mental. The course is slow and insidious. The condition bores its way into the system slowly, its approach being unheralded by fever or by severe pain. In order to establish the presence of chronic fatigue, the teacher should have in mind five points. (1) The child must complain of feelings of fatigue. (2) There must be an actual decrease in the child's average mental achievement. (3) There must be an actual decrease in the child's average physical strength and endurance. (4) There must be emotional unbalance. (5) The symptoms must have been observed for at least three months. It is rare for a child to show all the disorders, but, if the child complains of feelings of fatigue and there is one or more of the disturbances mentioned, the teacher is justified in suspecting the presence of chronic fatigue.

There are two ways in which the teacher can recognize the opposite of efficiency in a child: (1) by observing the functional reactions in response to stimuli and (2) by using the so-called "questionnaire" method.

The first method does not require either special skill or particular knowledge. All that is needed is to observe the reactions of the child during his activity—either work or play. It may seem difficult to determine whether a reaction is normal or abnormal, but, as a matter of fact, it is comparatively easy once one's attention is called to what constitutes an abnormal reaction. By training themselves to notice abnormal reactions, teachers can serve as "first-aid" diagnosticians. While a teacher's opinion as to what ails a child should not be decisive and final, the teacher, through her close contact with pupils, can and should recognize the first signs of abnormality. If there is an early recognition of any deviation from health, a ready cure is more likely to be effected.

Take, for example, *the muscular system*, the development and strength of which determines bodily balance and mechanics. The posture the child assumes on standing, walking, or sitting can be taken as an index of his general efficiency. Curvature of the spine, shoulders held unevenly, and the head flexed to one side indicate not only poor muscle tone but often depletion in reserve energy. The tired child stands with his feet unevenly placed and usually leans on something for better support of his body. During light gymnastics the tired child often betrays his fatigued state by the unsteadiness with which he holds up his arms and hands.

Second, there are disturbances of *the nervous system.* It is a well-known fact that the emotions express themselves in nerve reactions. These reactions can be interpreted through the muscular reactions produced. All the fundamental emotions illustrate this fact—*pain, anger, fear:* we frown, our faces are stern, we tighten our lips, we set our teeth, we blush, we become pale, we weep; *happiness, pleasure:* we smile, we laugh, we whistle, we sing, we dance, we relax; *interest:* we sit erect, we are tense. Through the contractions of its muscles, the face is the mirror of one's emotional life. The tired child is usually not happy. His face is drawn; his eyes are sorrowful; his emotional feelings and his subjective complaints express themselves in such muscular speech as frowning, wrinkling of the forehead, and tension of the mouth. Often he develops a chronic habit of repeated contractions of muscles of the face, which cause grimaces and blinking of the eyes. At times the eyelids, es-

pecially the lower ones, become relaxed, causing the appearance of puffiness. In line with all these signs are the poor inhibition and the imperfect co-ordination which are responsible for the poor poise and the restlessness of the tired child. He cannot sit still; his body is always in motion. He wriggles in his seat. He scratches his arms; he rubs his head; he runs his hands through his hair. Instead of holding his hands folded quietly on the desk, he cracks his knuckles, and he blows or picks his nose. His eyes are everywhere but on his own book or paper. He cannot concentrate; he cannot follow attentively the teacher's instructions. He often stutters and stammers and runs his words together.

Third, disturbances in *the vasomotor system* reveal themselves in the appearance of the face, which becomes successively red and pale. The skin of the tired child often shows an unusual pallor; the feet and the hands are cold and clammy and frequently mottled.

Finally, *the circulatory system* is involved in chronic fatigue. The blood vessels of the throat may be seen throbbing even though the child may be sitting quietly in his seat. The heart sounds may be louder and the heart rate more easily varied than in the case of a healthy child.

Such are the reactions of a tired child to stimuli. Such are his responses to daily activities.

The second method of recognizing fatigue determines by means of questionnaires the child's habits of living and his reactions to his daily life. These questionnaires are answered by the child himself as well as by his mother, his classroom teacher, and his gymnasium teacher.[1] One set of questions for the child pertains to his habits of living, as, for example, the time he arises in the morning, the time he goes to bed, how he spends his time after school, and whether he does any outside work for pay. A second set deals with his functional capacity, as, for example, whether he gets tired in the morning, whether he gets tired in the afternoon, whether gymnasium exercises tire him, whether he suffers from headaches, whether his eyes hurt, and whether he bites his finger nails.

Perhaps the reader will be surprised that the answers of a child

[1] Max Seham and Grete Seham, *The Tired Child*, p. 107. Philadelphia: J. B. Lippincott Co., 1927.

are given consideration. Most physicians treat but lightly, if they do not disregard entirely, the information the child himself offers with regard to his physical condition. Indeed, so little do physicians appreciate the child's power to observe and to realize what ails him that they confer almost entirely with the mother. Experience, however, reveals the accuracy and the reliability of children's answers. In fact, it has been found that many children are more truthful in their answers than are their mothers. Children are not as likely to shape their answers to conform to a standard. In this day of widespread health education mothers have learned what constitutes right living. It therefore happens that their answers frequently stand for what their children should do, not for what they actually do.

Questions asked of a child must be direct, specific, and objective without implying what the answer should be. For example, if one wishes to determine the amount of candy a child consumes in a day, one should not ask: "How much candy do you eat a day?" Such a question may result in the equally indefinite answer "Not much." Some children understand "not much" to mean one or two pieces of candy; others, four or five. Therefore, it is better to ask the child: "How many pieces of candy do you eat every day?" Nor is it advisable to group two questions in one, as, for example, "Do you sigh or yawn a great deal?" It is better to ask: "Do you sigh a great deal?" "Do you yawn a great deal?" These suggestions apply to all questions pertaining to habits of living.

Still more important, perhaps, than the specificity of a question is its objectiveness. It is quite true that the child is likely to shape his answer to whatever he assumes the answer should be from the attitude of the examiner and the inflection of his voice. A striking example of this fact is the following incident. Accompanied by a social nurse, a girl eleven years old went to a dispensary clinic for examination. To the physician's question as to what she had eaten that day, the child replied, "Nothing." That the child spoke the truth was learned later by the nurse, who knew that there was not enough money in the home to buy a loaf of bread. The physician, ignorant of this fact, thought that the child was reluctant to give information and asked her again what she had eaten for breakfast.

This time she replied, "Bread and butter." The physician asked, "What else?" The child said, "A glass of milk." The physician then asked, "Didn't you have any fruit?" "Yes, grapefruit." "Nothing else?" "Oh, yes, cereal and cream." The child, of course, was merely conforming to the expected answers.

Questions beginning or ending with "don't you" must be avoided. For example, such questions as the following are invariably answered in the affirmative: "Don't you like to go to school?" "You like to go to school, don't you?" The question should read: "Do you like to go to school?"

In general, the best procedure is to allow the child to write the answers himself. In school and in the Nutritional Clinic of the Franklin Co-operative Milk and Creamery Association of Minneapolis, the children are taken in groups. The questionnaires are given to them with the following instructions.

> This is a test of your honesty. We want to see how truthful you are. If you answer all these questions just the way things are, your test will be all right. For instance, the first question is: "What time do you go to bed?" If you go to bed at nine o'clock, write "nine o'clock." Do the same with all the other questions.

Every questionnaire is analyzed by the examiner, and the answers indicating inadequate habits of living or sub-efficiency are checked. Certain questions, especially those that are answered unfavorably, are asked of the child individually. This procedure serves a double purpose. The accuracy of the statements is checked, and a personal impression of the child is gained. For example, the child's answers to the questions pertaining to the nervous symptoms are checked directly against the observations of the examiner. If, during the questioning, the child displays restlessness and fidgetiness and plays with whatever he finds at hand, the answers to the questionnaire should confirm the observations. If the group of children is small, the examiner questions each child as soon as he has finished. In no case should the personal interview take place later than two days after the child has answered the questions.

Except for a few questions regarding heredity, the questionnaire to be answered by the mother is similar to that answered by the child. The questionnaires for the classroom teacher and the gym-

nasium teacher contain questions pertaining to the general efficiency of the child, his social adaptability, his emotional reactions, his mental ability in school, his general intelligence, and his strength and endurance. Wherever feasible, the question is so worded as to allow "Yes" or "No" for the answer.

That the questionnaire method is of practical value in diagnosis can be seen from the following data. One hundred and nine unselected children between the ages of twelve and one-half and thirteen and one-half were thoroughly studied. Of these, fifty-nine were found to be abnormal by means of the usual routine medical examination. The remaining fifty were used as normal controls. All the children were subjected to thorough physical examinations, including height and weight determinations. Their questionnaires were carefully analyzed, and each answer denoting an inadequate health habit (the schedule of rational habits of living shown in Table I forming the standard) or sub-efficiency was marked with a plus sign. For example, John S. answered in the affirmative questions pertaining to (1) headaches, (2) backaches, (3) insomnia, (4) fatigability, and (5) crying easily. Five plus signs therefore appeared on his questionnaire. His health habits yielded four plus signs: (1) inadequate breakfast, (2) inadequate dinner, (3) no outdoor play, and (4) physical work for pay (paper route for two hours after school). In the same way the mother's answers and the teacher's answers were marked, the former resulting in five plus signs and the latter in fifteen. Thus, all the questionnaires were analyzed, and the information obtained was compared with the diagnoses made by means of thorough physical examinations. In the case of ninety-nine children the anatomical diagnosis and the functional diagnosis made by means of the questionnaire agreed. In the ten cases in which the diagnoses disagreed the examination usually pronounced the child well, but the questionnaire method revealed a decrease in general efficiency. One example will suffice. Florence G. did poor work in school. Her mother's replies indicated that the child was irritable and hard to handle; she had a poor appetite, and, on account of tiredness, she refused to get up in the morning. Florence herself admitted that she was tired, that she was not doing well in school, that she was sleepy during the day, and that she suffered

TABLE I

Daily Schedule of Rational Habits for School Children

Age in Years	Time of Rising	Breakfast Time	Number of Minutes between Breakfast and School	Morning Session of School		Number of Minutes between School and Luncheon	Luncheon Time	Number of Minutes between Luncheon and School*	Afternoon Session of School		Dinner Time	Number of Minutes of Free Time†	Number of Minutes for Play‡	Number of Minutes for Miscellaneous Work§		Bed Time‖	Number of Hours of Sleep	Diet in Calories
				Beginning	End				Beginning	End				Physical	Mental			
6	7:00	7:45-8:05	40	8:45	11:30	30	12:00-12:30	45	1:15	3:00	6:00-6:30	180	180	0	0	6:30	12	1,500-1,600
7	7:00	7:45-8:05	40	8:45	11:30	30	12:00-12:30	45	1:15	3:00	6:00-6:30	180	180	0	0	6:30	12	1,600-1,700
8	7:00	7:45-8:05	40	8:45	11:45	30	12:15-12:45	30	1:15	3:15	6:00-6:30	195	195	0	0	7:00	11½	1,700-1,900
9	7:00	7:45-8:05	40	8:45	11:45	30	12:15-12:45	30	1:15	3:15	6:00-6:30	225	200	25	0	7:30	11	1,900-2,100
10	7:00	7:45-8:05	40	8:45	11:45	30	12:15-12:45	30	1:15	3:15	6:00-6:30	225	165	30	30	7:30	11	2,100-2,300
11	7:00	7:45-8:05	40	8:45	12:00	15	12:15-12:45	30	1:15	3:15	6:30-7:00	255	180	45	30	8:00	10½	2,300-2,500
12	7:00	7:45-8:05	40	8:45	12:00	15	12:15-12:45	30	1:15	3:15	6:30-7:00	285	180	60	45	8:30	10	2,700-2,900
13	7:00	7:45-8:05	40	8:45	12:00	15	12:15-12:45	30	1:15	3:15	6:30-7:00	315	180	60	75	9:00	9½	2,900-3,200
14	7:00	7:45-8:05	40	8:45	12:00	15	12:15-12:45	30	1:15	3:15	6:30-7:00	315	165	60	90	9:00	9½	3,200-3,400
15	7:00	7:45-8:05	40	8:45	12:00	15	12:15-12:45	30	1:15	3:15	6:30-7:00	315	165	60	90	9:00	9½	3,300-3,900

* From fifteen to twenty minutes of this time should be used as a rest period.

† By free time is meant the time between the end of the afternoon session of school and bedtime, the time spent at dinner not being included.

‡ Part of the free time should be given to play, preferably out of doors.

§ Only a small part of the free time should be devoted to work requiring responsibility. No child less than nine years old should be required to do any mental or physical work out of school.

‖ Thirty minutes is allowed between going to bed and falling asleep.

from headaches two to three times a week. Thus, everything seemed to point toward a decrease in her functional capacity. Yet physically she was apparently well. The causes of her symptoms were found in the replies to the questionnaires. Florence attended a motion-picture show as often as five times a week and rarely went to bed before half-past eleven, spending the evening in reading. In this case undoubtedly, the questionnaire method proved of value in diagnosing the difficulty.

A comparison of the questionnaires of abnormal children with those of normal children showed that, in general, (1) abnormal children have poorer health habits than do normal children (an average of 9.6 plus signs as compared with 5.6); (2) their efficiency is much less than that of normal children (9.9 plus signs as compared with 3.6); (3) their efficiency as judged by their mothers is inferior to that of normal children (8.4 plus signs as compared with 4.2); and (4) their efficiency as observed by their teachers is lower than that of normal children (17.5 plus signs as compared with 8.6).

It is true, of course, that the home is fully as responsible as the school in the production of the "tired child" and that only through the best co-operation between the home and the school can the problem be solved adequately, but the teacher, by applying the two methods described, can eliminate a great deal of chronic fatigue in her classroom and also avoid becoming a "tired teacher."

WHAT CHANGES THE I.Q.?

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It is generally believed that for groups of children the I.Q. obtained by means of the Stanford-Binet test is relatively constant. It is also recognized that for individuals a certain amount of variation is somewhat common. It has ordinarily been assumed that large variations in I.Q. are very infrequent and that it is important to examine any case where great change occurs for its cause.

Two cases of rather extreme change are on record at the Johns Hopkins University Educational Clinic. Both the individuals concerned are boys. Table I shows their standing. It will be noted that

TABLE I

CHRONOLOGICAL AGES, MENTAL AGES, AND INTELLIGENCE QUOTIENTS OF GEORGE AND BILLY

	Chronological Age	Mental Age	Intelligence Quotient
George:			
First test	12–8	10–7	84
Second test	13–8	13–9	101
Billy:			
First test	8–2	10–11	134
Second test	9–3	14–5	156

George was at the first test two years and one month retarded mentally while Billy was two years and nine months accelerated mentally. In twelve and thirteen months, respectively, they each gained approximately three years in mental age. A comparison of the two tests for each boy will show where the increase was made.

A summary of the results of the two tests given to George, who was born September 20, 1913, is presented on pages 115–16.

It will be seen that George's gain is accounted for as follows: While his basal age was eight years the first year, it became nine years the second year as a result of his passing the weights test.

May 22, 1926	May 7, 1927
Eight-year test: All correct	
Nine-year test: + 1. Giving the date − 2. Arranging five weights + 3. Making change + 4. Four digits backward + 5. Three words in one sentence + 6. Finding rhymes Credit 10 months	Nine-year test: All correct
Ten-year test: − 1. Vocabulary + 2. Absurdities + 3. Drawing designs from memory − 4. Reading and report + 5. Comprehension + 6. Naming sixty words Credit 8 months	Ten-year test: + 1. Vocabulary + 2. Absurdities + 3. Drawing designs from memory − 4. Reading and report + 5. Comprehension + 6. Naming sixty words Credit 10 months
Twelve-year test: − 1. Vocabulary − 2. Definitions: abstract words − 3. Ball and field − 4. Dissected sentences + 5. Interpretation of fables (credit: 1, 1, 1, 2, 1) − 6. Five digits backward + 7. Pictures; interpretation + 8. Finding likenesses; three things Credit 9 months	Twelve-year test: − 1. Vocabulary + 2. Definitions: abstract words + 3. Ball and field − 4. Dissected sentences + 5. Interpretation of fables (credit: 2, 1, 1, 2, 2) + 6. Five digits backward + 7. Pictures; interpretation + 8. Finding likenesses; three things Credit 18 months
Fourteen-year test: − 1. Vocabulary + 2. Induction test − 3. President and king − 4. Problem questions − 5. Arithmetic reasoning − 6. Reversing hands of clock (all, −) Credit 4 months	Fourteen-year test: − 1. Vocabulary + 2. Induction test − 3. President and king + 4. Problem questions − 5. Arithmetic reasoning − 6. Reversing hands of clock (first, +) Credit 8 months

May 22, 1926	May 7, 1927
	Sixteen-year test:
	− 1. Vocabulary
	+ 2. Interpretation of fables
	− 3. Differences between abstract terms
	+ 4. Inclosed boxes
	− 5. Six digits backward
	+ 6. Code
	Credit 15 months
	Eighteen-year test:
	− 1. Vocabulary
	+ 2. Paper-cutting test
	− 3. Repeating eight digits
	− 4. Repeating thought of passage
	− 5. Seven digits backward
	− 6. Ingenuity test
	Credit 6 months

Gains beyond this year were: the vocabulary test in the ten-year test, adding two months credit; abstract words, ball and field, and five digits backward in the twelve-year test, adding nine months credit; problem questions in the fourteen-year test, adding four months credit; interpretation of fables, inclosed boxes, and code in the sixteen-year test, adding fifteen months credit; and paper-cutting in the eighteen-year test, adding six months credit.

It is, of course, conceivable that George would have passed the first year the inclosed boxes and the code in the sixteen-year test had they been given. Also he might have passed the paper-cutting test of the eighteen-year test. If this were assumed, it would account for sixteen months of the increase; that is, it is possible that George should have been rated sixteen months higher the first time, which would have given him a mental age of eleven years and eleven months and an I.Q. of 94. Some explanation aside from the test itself must then be found for the increase of the additional one year and ten months. Certain changes can be attributed to expected growth. Such changes are the weights in the nine-year test; vocabulary in the ten-year test; abstract words, ball and field, and five digits backward in the twelve-year test. This gives thirteen months credit which might be assumed to allow for the year's gain which would be

expected in a normal child. There is still nine months gain to account for. The tests yielding this are problem questions in the fourteen-year test and interpretation of fables in the sixteen-year test.

Another method of explaining the gain is to look for environmental influences which might account for it. In this case such influences are easy to find. When George was first seen, he was in rather desperate straits. He was abused by a stepfather and had a bad name at school because "he could not learn to read" and because his brother had been sent to a school for correction. A short time before he came to the clinic he had been recommended to the juvenile court for stealing. He had committed the offense in order to secure what he needed but for which he was afraid to ask at home. When he was tested, it was found that his reading ability was below first-grade standard as measured by the Gray Standardized Oral Reading Paragraphs and of Grade 3.56 according to the Stanford Achievement Test. He had spent five years in "advancing" from Grade II A to Grade IV A with little apparent advance. He had very specialized reading difficulties, which were accompanied by an evident mental confusion or blocking that dominated all his thinking. The reading problem was attacked. He was seen once a week for a lesson of an hour and a half for a period of seven weeks. At the end of that time he was found to have gained one year in oral-reading ability. The summer vacation intervened. He was seen only intermittently in the autumn and winter because of a broken ankle. His visits to the clinic were also made more difficult because the family had moved to a suburb. He entered a new school unhandicapped by the reputation of his brother and by his own previous failure. He entered the upper fourth grade and passed at the end of the term. A social-service worker had followed the case from the beginning. She succeeded in changing the home attitude toward the boy. During the year he became an enthusiastic boy scout and was nearly ready for the examination for first-class scout. His increasing ability to handle the reading situation opened new opportunities to him in school, and at the time of the second Stanford-Binet test his reading ability as measured by the Stanford Achievement Test was of Grade 4.7, and on the Gray Standardized Oral Reading Paragraphs his grade rating was 2.75.

The significant changes in George's environment and in his own attitude and in his school ability as evidenced by his increased ability in reading might reasonably be offered as contributing causes of his increase in intelligence as measured by the Stanford-Binet test. The degree of influence of these factors would be difficult, if not impossible, to show.

Billy was brought to the clinic the first time by his mother for advice as to the desirability of his passing from the third grade to the fifth in transferring from one private school to another. The school which he was attending admitted both boys and girls through the fourth grade but only girls beyond that grade. This school was willing to recommend Billy for the fifth grade in a particular boys' school. As his mother did not wish to make such a change without advice, she brought him to the clinic. He was found to have a mental age of ten years and eleven months according to the Stanford-Binet test. This is evidence of ability to do fifth-grade work. He was given the Stanford Achievement Test, on which his composite score gave him an age equivalent of eleven years and six months with a grade equivalent of 5.7. This corroborated the evidence of the Stanford-Binet test, and it was recommended that he be placed in the fifth grade. At the end of a year his mother reported that, according to the school records, he had led his class and asked that he be retested to determine whether he had fulfilled the predictions of the first tests. His mental age according to the Stanford-Binet test was fourteen years and five months, an increase of three years and six months over that of the first test. This gave him an I.Q. of 156. At the same time the Stanford Achievement Test was given. His composite score gave him an age rating of thirteen years and a grade standing of 7.3. As an additional measurement at this time he was given the Terman Group Test of Mental Ability, which is planned for Grades VII–XII. On this test he made a score which gave him a mental age of thirteen years and nine months. These test results are sufficiently in agreement to classify him as a boy of unusual ability. The question is, What caused the increase of three years and six months in mental age in the thirteen months between the tests?

The following is a summary of the results of the Stanford-Binet test. Billy was born January 12, 1919.

March 4, 1927	April 9, 1928
Nine-year test: All correct	
Ten-year test: + 1. Vocabulary + 2. Absurdities + 3. Drawing designs from memory + 4. Reading and report + 5. Comprehension − 6. Naming sixty words Credit 10 months	Ten-year test: + 6. Naming sixty words Credit 12 months, basal test
Twelve-year test: + 1. Vocabulary − 2. Definitions: abstract words − 3. Ball and field + 4. Dissected sentences − 5. Interpretation of fables + 6. Five digits backward − 7. Pictures; interpretation − 8. Finding likenesses; three things Credit 9 months	Twelve-year test: + 1. Vocabulary + 2. Definitions: abstract words + 3. Ball and field + 4. Dissected sentences + 5. Interpretation of fables + 6. Five digits backward − 7. Pictures; interpretation − 8. Finding likenesses; three things Credit 18 months
Fourteen-year test: − 1. Vocabulary − 2. Induction test − 3. President and king − 4. Problem questions − 5. Arithmetic reasoning + 6. Reversing hands of clock Credit 4 months	Fourteen-year test: + 1. Vocabulary + 2. Induction test + 3. President and king − 4. Problem questions + 5. Arithmetic reasoning + 6. Reversing hands of clock Credit 20 months
Sixteen-year test: − 1. Vocabulary − 2. Interpretation of fables (no credit; first four given) − 3. Differences between abstract terms − 4. Inclosed boxes − 5. Six digits backward − 6. Code (not given) No credit	Sixteen-year test: − 1. Vocabulary + 2. Interpretation of fables (credit: 2, 1, 1, 2, 2) − 3. Differences between abstract terms + 4. Inclosed boxes − 5. Six digits backward + 6. Code Credit 15 months

March 4, 1927	April 9, 1928
Eighteen-year test:	Eighteen-year test:
	— 1. Vocabulary
— 2. Paper-cutting test	— 2. Paper-cutting test
	— 3. Repeating eight digits
	— 4. Repeating thought of passage
	— 5. Seven digits backward
	— 6. Ingenuity test
	No credit

Billy had a basal age of nine years at the first test, and this became ten years at the second test by his gaining credit for naming sixty words in three minutes. Beyond this year his gains were abstract words, ball and field, and interpretation of fables in the twelve-year test, adding nine months credit; vocabulary, induction, president and king, and arithmetic reasoning in the fourteen-year test, adding sixteen months credit; interpretation of fables, inclosed boxes, and code in the sixteen-year test, adding fifteen months credit.

What advantage would have been gained by extending the first test? That is, what is the evidence that Billy might not have been completely tested the first time? The only test that Billy passed the second time which he was not given the first time was the code. This would have added five months to his mental age if he had passed it and would have left three years and one month to be accounted for. On the basis of his I.Q. at the first test (134), a gain of about one year and three months the second year was anticipated. That gain may be tentatively located as follows: sixty words in three minutes in the ten-year test; abstract words, ball and field, and interpretation of fables in the twelve-year test; and vocabulary in the fourteen-year test. These tests account for a gain of fifteen months, or one year and three months.

There is still one year and ten months gain above that which could be expected as due to predicted growth. This gain came from the following tests: induction, president and king, and arithmetic reasoning in the fourteen-year test and interpretation of fables and inclosed boxes in the sixteen-year test. It must be remembered that Billy attempted in the first test all these tests except the code, which has been tentatively allowed on the first test. Therefore, it seems

evident that the additional responses were due to growth which could not have been predicted by the first test. The fact of gain can be pointed out more easily than its cause.

There are no such hopeful clues in environmental causes as in the case of George. Billy has a very normal home life in a family of good social and economic standing. He has acquired good social habits, is courteous, and is frank without being forward. He was working in a class of boys and girls where there was apparently little to stimulate him to use his great ability. He was not positively unhappy there; nor was he a nuisance; but he exerted himself little, and his mother said that he was "nervous" and very restless at home. After the tests, he entered a boys' school in a class which had had one more year of schooling than he had had and where he had to compete with boys older than himself. He found the stimulus he needed, led his class without strain, entered enthusiastically into all the sports, adapted himself promptly to the new social situation, and, according to his mother, lost all the nervousness he was acquiring in the earlier situation. Just how far this needed adjustment led to the increase in intelligence as measured by the Stanford-Binet test cannot be estimated, but it is not unreasonable to believe that it had some part in the result.

The two cases are of interest because the first comes from the low end of the intelligence range which is regarded as about normal while the second comes from the very small group of persons who are near genius. So far as George's gain can be traced to environmental conditions, there were release from strain both at home and at school and the remedying of a learning situation which handicapped him in many ways. Added to this was the bringing into his life of a new and wholesome interest in scout activities. In Billy's case there was an increased stimulus to mental activity as a result of being placed among those who were approximately his mental equals.

Both cases suggest the danger of discontinuing a test on the assumption that the child can go no farther.

BOOKS FOR SUPPLEMENTARY READING IN THE PRIMARY GRADES[1]

Teaching children to read is teaching them to read subject matter which was written to be read, not to be conned over in preparation for a daily task. In the end, the most valid evidence that a child has learned to read is a favorable answer to the question, Does he read in quest of information or entertainment? How well he reads is an entirely different matter, to be investigated from a great many different angles. In brief, the teaching of reading in the primary school is a great deal more than teaching pupils to pronounce words or practice in that mysterious exercise called "silent reading" —as if reading were anything else than silent reading. If children are to learn to read in the true sense, they must have books which they can read. Hence the following list of books for little children which have been found useful in the primary section of the University Elementary School of the University of Chicago.

Children at the level of the kindergarten indicate by their behavior when they are ready to enter reading classes. They take the first and all-important step in the learning process by discerning for themselves what reading is for. They have seen other people reading, and they are surrounded by opportunities to read. From that point on they are surrounded by reading material with which they may experiment, all the way from looking at pictures and asking questions about them to the point at which they seek books and, sitting down in a corner perhaps, become absorbed.

Every schoolroom up to the level of the fourth year beyond the kindergarten is provided with reading tables on which books are kept in such display as to attract the children and to guide them in their

[1] This article was prepared by a number of persons connected with the University Elementary School of the University of Chicago. The introduction was prepared by H. C. Morrison. The list of books for the kindergarten was compiled by Olga Adams and Gertrude M. Phillips; the list of books for the first grade, by Marjorie Hardy, Nina Jacob, and Gertrude M. Phillips; the list of books for the second grade, by Ada R. Polkinghorne, Hazel Menier, and Gertrude M. Phillips; and the list of books for the third grade, by Agnes Morrissey, Laura Oftedal, and Gertrude M. Phillips.—EDITOR.

choices. To these tables they may resort whenever they are not otherwise engaged. From the time at which they are beginning to get their first inklings of the structure of reading, venturesome individuals begin to test their dawning and growing reading ability. In time, one after another, they grow into the capacity to select books and to read whole books as a matter of course. They have then learned to read, and they meet no more with reading classes. Beyond that point, reading is a matter of learning to study and of utilizing the reading-room for the accumulation of a background of experience with books.

From the beginning of the fourth year, and sometimes earlier, the children go to the free-reading room for a period of thirty minutes daily and for as much longer as they desire and time permits. It is a pleasant sight to see these children invade the reading-room, go directly to the shelves, secure their books—and then to sense the utter absorption of a whole roomful. So it goes all the way up through the high school.

For all of this and for the early building of preferences for good reading, the reading tables of the primary school furnish the foundation and the opportunity.

Books Suitable for the Kindergarten Reading Table

About Bunnies. P. F. Volland Co.
Baby's A-B-C and 1-2-3 Book. Samuel Gabriel & Sons Co.
Billy's Farm Friends. P. F. Volland Co.
Chicken World (Smith). G. P. Putnam's Sons.
Children at Play in Many Lands. P. F. Volland Co.
Child's Garden of Verses (Stevenson). Charles Scribner's Sons.
Eddie Elephant. P. F. Volland Co.
Everything and Anything (poems) (Aldis). Minton, Balch & Co.
Farm Book (Smith). Houghton Mifflin Co.
Funny Little Book (Gruelle). P. F. Volland Co.
Good Little Children from A to Z. P. F. Volland Co.
I Live in a City (poems) (Tippett). Harper & Brothers.
Johnny Crow's Garden (Brooke). Frederick Warne & Co.
Little Bim the Circus Boy. P. F. Volland Co.
Little Black Sambo (Bannerman). M. A. Donohue & Co. or Frederick A. Stokes Co.
Little Brown Bear (Gruelle). P. F. Volland Co.
Little Chick That Would Not Go to Bed (Deihl). Samuel Gabriel & Sons Co.

Little Dog That Would Not Wag His Tail (Deihl). Samuel Gabriel & Sons Co.
Little Jack Horner (illustrated by Wright). Rand McNally & Co.
Little Kitten That Would Not Wash Its Face (Deihl). Samuel Gabriel & Sons Co.
Little Rabbit That Would Not Eat (Deihl). Samuel Gabriel & Sons Co.
Little Small Red Hen. M. A. Donohue & Co.
Little Sunny Stories (Gruelle). P. F. Volland Co.
Mother Goose. P. F. Volland Co.
My Automobile Book. Samuel Gabriel & Sons Co.
My Book of Birds. Samuel Gabriel & Sons Co.
My Book of Pets. P. F. Volland Co.
My Book of Wild Animals. Samuel Gabriel & Sons Co.
My Four-footed Friends. Samuel Gabriel & Sons Co.
My Twin Kitties (Deihl). Samuel Gabriel & Sons Co.
My Twin Puppies (Deihl). Samuel Gabriel & Sons Co.
Night before Christmas. Samuel Gabriel & Sons Co.
Nonsense A-B-C's (Lear). Rand McNally & Co.
Now We Are Six (poems) (Milne). E. P. Dutton & Co.
Our Child's Favorites (illustrated by Wright). Rand McNally & Co.
Over Land and Sea. Samuel Gabriel & Sons Co.
Polly Flinders (illustrated by Wright). Rand McNally & Co.
Raggedy Ann and Andy (Gruelle). P. F. Volland Co.
Railway Book. Samuel Gabriel & Sons Co.
Seashore Book (Smith). Houghton Mifflin Co.
Silver Pennies (poems) (edited by Thompson). Macmillan Co.
Sunny Rhymes for Happy Children (poems) (Miller). P. F. Volland Co.
Tale of Jemima Puddle Duck (Potter). Frederick Warne & Co.
Tale of Mrs. Tittlemouse (Potter). Frederick Warne & Co.
Tale of Peter Rabbit (Potter). Frederick Warne & Co. or Samuel Gabriel & Sons Co.
Tale of Squirrel Nutkin (Potter). Frederick Warne & Co.
Three Bears. M. A. Donohue & Co.
Three Little Pigs. M. A. Donohue & Co. or Samuel Gabriel & Sons Co.
Tommy Tittlemouse (illustrated by Wright). Rand McNally & Co.
Toy Animals and Tinkle the Tired Fairy. P. F. Volland Co.
When We Were Very Young (poems) (Milne). E. P. Dutton & Co.

Books Suitable for the First-Grade Reading Table

Ameliar Anne and the Green Umbrella (Heward). George W. Jacobs.
Bobbs-Merrill Primer (Baker and Baker). Bobbs-Merrill Co.
Burgess Bird Book for Children. Little, Brown & Co.
Caldecott Picture Books. Frederick Warne & Co.
Child-Library Readers (Elson). Scott, Foresman & Co.
Child-Story Readers (Freeman, Storm, Johnson, and French). Lyons & Carnahan.

Children's Corner (Le Mair). David McKay.
Clean Peter and the Children of Grubby Lea (Adelborg). Longmans, Green & Co.
Dutch Twins Primer (Perkins). Houghton Mifflin Co.
Elson Readers. Scott, Foresman & Co.
Everyday Doings at Home (Serl). Silver, Burdett & Co.
Everything and Anything (Aldis). Minton, Balch & Co.
Farm Book (Smith). Houghton Mifflin Co.
Field-Martin Primer. Ginn & Co.
F-U-N Book (La Rue). Macmillan Co.
Gordon and His Friends (Bryant). Houghton Mifflin Co.
Grandpa and the Tiger (Heward). Macrae Smith Co.
Granny Goose. P. F. Volland Co.
Happy Children Readers (Pennell and Cusack). Ginn & Co.
In Animal Land (La Rue). Macmillan Co.
Johnny Crow's Garden (Brooke). Frederick Warne & Co.
Johnny and Jenny Rabbit (Serl). American Book Co.
Lincoln Readers (Davidson). Laurel Book Co.
Little Black Sambo (Bannerman). Frederick A. Stokes Co.
Little Girl Who Curtsied (Baker). Duffield & Co.
New Barnes Readers (Robbins and Graff). Laidlaw Brothers.
Old Mother Goose (English edition). Thomas Nelson & Sons.
Peter Patter Book (Jackson). Rand McNally & Co.
Reading Literature, Primer and First Reader (Free and Treadwell). Row, Peterson & Co.
Singing Farmer (Tippett). World Book Co.
Story of Milk (Zirbes). Keystone View Co.
Surprise Stories (Hardy). Wheeler Publishing Co.
Tale of Peter Rabbit (Potter). Frederick Warne & Co.
Under the Story Tree (La Rue). Macmillan Co.
Velveteen Rabbit (Williams-Bianca). George H. Doran Co.
Wag and Puff (Hardy). Wheeler Publishing Co.
When We Were Very Young (Milne). E. P. Dutton & Co.
Winnie the Pooh (Milne). E. P. Dutton & Co.
Winston Companion Primer and First Reader (Firman and Maltby). John C. Winston Co.
Winston Primer and First Reader (Firman and Maltby). John C. Winston Co.

Books Suitable for the Second-Grade Reading Table

About Harriet (Hunt). Houghton Mifflin Co.
Adventures of a Brownie (Mulock). J. B. Lippincott Co.
Adventures of the Greyfurs Family (Nyde). J. B. Lippincott Co.
Adventures of Reddy Fox (Burgess). Little, Brown & Co.
Adventures of Twinkly Eyes (Chaffee). Milton Bradley Co.
Ameliar Ann and the Green Umbrella (Heward). George W. Jacobs.

Arabella and Araminta Stories (Smith). Small, Maynard & Co.
Bad Little Rabbit (Bigham). Little, Brown & Co.
Best Stories (Hardy). Wheeler Publishing Co.
Black-eyed Puppy (Pyle). E. P. Dutton & Co.
Bob and Betty with the Workers (Dopp). Rand McNally & Co.
Bobby of Cloverfield Farm (Orton). Frederick A. Stokes Co.
Bojabi Tree (Rickert). Doubleday, Page & Co.
Bunny Rabbit's Diary (Blaisdell). Little, Brown & Co.
Child's Garden of Verses (Stevenson). Charles Scribner's Sons.
Cubby Bear (Ellingwood). Ginn & Co.
Dutch Twins (Perkins). Houghton Mifflin Co.
Field and Tree (Meyer). Little, Brown & Co.
Fifty Famous Stories Retold (Baldwin). American Book Co.
First Lessons in Nature Study (Patch). Macmillan Co.
Friendly Fairies (Gruelle). P. F. Volland Co.
Good Times on the Farm (Dietz and Cox). Newson & Co.
Grasshopper Green and the Meadow Mice (Roe). P. F. Volland Co.
Great Adventures of Mrs. Santa Claus (Addington). Little, Brown & Co.
Happy Jack (Burgess). Little, Brown & Co.
In Animal Land (La Rue). Macmillan Co.
In the Animal World (Serl). Silver, Burdett & Co.
In Fable Land (Serl). Silver, Burdett & Co.
In Fairy Land (Serl). Silver, Burdett & Co.
Johnny and Jenny Rabbit (Serl). American Book Co.
Little Dog Ready (Stryker). Henry Holt & Co.
Lost Monkey (Rice). Newson & Co.
Mrs. Peter Rabbit (Burgess). Little, Brown & Co.
Nature Stories (Gardner). Macmillan Co.
Ned and Nan in Holland (Olmstead). Row, Peterson & Co.
New Stories (Hardy). Wheeler Publishing Co.
Old Mother West Wind (Burgess). Little, Brown & Co.
Peter Pan for Little People. Macmillan Co.
Peter and Polly in Winter (Lucia). American Book Co.
Picture Tales from the Russian (Carrick). Frederick A. Stokes Co.
Pinafore Palace (Wiggin and Smith). Doubleday, Page & Co.
Pinocchio (Collodi). Ginn & Co.
Polly and Dolly (Blaisdell). Little, Brown & Co.
Princess and the Goblin (Macdonald). J. B. Lippincott Co.
Red Feather (Morcomb). Lyons & Carnahan.
Robinson Crusoe (edited by Baldwin). American Book Co.
Six Little Ducklings (Pyle). Dodd, Mead & Co.
Stories of Animal Village (Richey). Beckley-Cardy Co.
Story of Mrs. Tubbs (Lofting). Frederick A. Stokes Co.
Under the Story Tree (La Rue). Macmillan Co.

BOOKS SUITABLE FOR THE THIRD-GRADE READING TABLE

American History for Little Folks (Blaisdell and Ball). Little, Brown & Co.
American Indian Fairy Tales (Larned). P. F. Volland Co.
Arabian Nights Stories (edited by Colum). Macmillan Co.
As the Goose Flies (Pyle). Little, Brown & Co.
At the Back of the North Wind (Macdonald). Macmillan Co.
Book of the Sagas (Hoffman). E. P. Dutton & Co.
Boys and Girls of Discovery Days (Bailey). A. Flanagan & Co.
Boy's King Arthur (Lanier) (illustrated by Wyeth). Charles Scribner's Sons.
Burgess Animal Book. Little, Brown & Co.
Cave Twins (Perkins). Houghton Mifflin Co.
Child Life in Other Lands (Perdue). Rand McNally & Co.
Children of Dickens (Crothers). Charles Scribner's Sons.
Children of History (Early Times) (Hancock). Little, Brown & Co.
Children of History (Later Times) (Hancock). Little, Brown & Co.
Children's Book of Christmas (Dier). Macmillan Co.
Child's Book of Modern Stories (Skinner). Duffield & Co.
Christmas Tales and Verse (Field). Charles Scribner's Sons.
Crack in the Dish (Clarke). Little, Brown & Co.
Cruikshank Fairy Book. G. P. Putnam's Sons.
Davy and the Goblin (Carryl). Houghton Mifflin Co.
Doctor Doolittle's Circus (Lofting). Frederick A. Stokes Co.
Dog, the Brownie and the Bramble Patch, The (Baker). Duffield & Co.
Don Quixote (edited by Parry). Dodd, Mead & Co.
Dutch Twins (Perkins). Houghton Mifflin Co.
Fables and Folk Stories (Scudder). Houghton Mifflin Co.
Fairy Tales (Perrault). E. P. Dutton & Co.
Fifty Famous People (Baldwin). American Book Co.
Fifty Famous Stories Retold (Baldwin). American Book Co.
Firelight Fairy Book (Beston). Atlantic Monthly Press.
For Days and Days (Wynne). Frederick A. Stokes Co.
Garden behind the Moon (Pyle). Charles Scribner's Sons.
Goblins of Haubeck (Bancroft). Robert M. McBride & Co.
Happy Jack (Burgess). Little, Brown & Co.
Heidi (Spyri). Ginn & Co.
In the Days of Giants (Brown). Houghton Mifflin Co.
Indian Days of Long Ago (Curtis). World Book Co.
Indian Old Man Stories (Linderman). Charles Scribner's Sons.
Japanese Fairy Tales (Hearn). Boni & Liveright.
Johnny Blossom (Zwilgmeyer). Pilgrim Press.
Jungle Book (Kipling). Doubleday, Page & Co.
Leif and Thorkel (Snedden). World Book Co.
Little People Who Became Great (Large). W. A. Wilde Co.

Little Princess (Burnett). Charles Scribner's Sons.
Log Cabin Days (Blaisdell and Ball). Little, Brown & Co.
Men Who Found America (Hutchinson). Barse & Hopkins.
Merry Animal Tales (Bigham). Little, Brown & Co.
Mr. Marionette (Colville). Houghton Mifflin Co.
Norse Stories (Mabie). Rand McNally & Co.
Our Little Norwegian Cousin (Wade). Page Co.
Peterkin Papers (Hale). Houghton Mifflin Co.
Poppy Seed Cakes (Clarke). Doubleday, Page & Co.
Prince Jan (Hooker). Doubleday, Page & Co.
Princess and the Goblin (Macdonald). J. B. Lippincott Co.
Puritan Twins (Perkins). Houghton Mifflin Co.
Sinopah (Schultz). Houghton Mifflin Co.
Squirrels and Other Fur Bearing Animals (Burroughs). Houghton Mifflin Co.
Stories the Iroquois Told Their Children (Powers). American Book Co.
Story Lady's Book (Faulkner). Small, Maynard & Co.
Swiss Twins (Perkins). Houghton Mifflin Co.
Wonderful Adventures of Nils (Lagerlof). Doubleday, Page & Co.

PUNISHMENTS RECOMMENDED FOR SCHOOL OFFENSES

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It was the third week of school, and the beginning teacher was consulting the principal. She felt that the problem of discipline in her room was becoming too difficult for her, and she had stopped in the principal's office to discuss the matter with him. The principal could not give her any very definite advice but suggested that she be more strict in punishing offenders. The beginning teacher left the office wondering why older teachers had not combined the results of their experience in working out methods of dealing with the different types of offenses which pupils commit. She spoke to another beginning teacher, who agreed with her and said that, although she had been consulting her roommate, an experienced teacher, she would much rather know the opinions of a group of teachers with regard to problems of discipline.

This article aims to correct in some measure the evident lack of disciplinary devices. It reports the opinions of forty-six experienced principals, supervisors, and teachers as to the manner in which specific school offenses should be dealt with. The data were obtained from graduate students in classes conducted by the writer in the University of Pittsburgh during the summer sessions of 1926 and 1927. All the students were experienced teachers in Pennsylvania.

These teachers classified school offenses into seventeen different types, as shown in the following outline, and then agreed on suitable punishments for each type. It is not intended that all the punishments listed under an offense should be used at each violation. The punishments are arranged in the order of severity and should be used in order as far as it is necessary to control the situation. Before any punishment is administered, positive means of rewarding the pupil for good conduct should be used. Furthermore, the teacher should talk with the offending pupil privately about the misconduct.

SCHOOL OFFENSES AND SUGGESTED CONDUCT GUIDES

1. Truancy
   a) Keep in after school to make up work
   b) Report case to parents
   c) Report case to public officer
2. Impertinence
   a) Oral reproof
   b) Put offender in place by a remark that will enlist pupils on your side
   c) Corporal punishment
   d) Dismissal from class
3. The "show-off" attitude
   a) Put offender in place by a remark that will enlist pupils on your side
   b) Removal of privileges
   c) Public acknowledgment of fault
4. Purposeful misbehavior in the classroom
   a) Removal of privileges
   b) Oral reproof
   c) Corporal punishment
5. Purposeful misbehavior outside the classroom
   a) Oral reproof
   b) Suspension
   c) Expulsion
6. Dishonesty in assigned work
   a) Removal of credit
   b) Assignment of extra work
   c) Seat pupil apart from group
7. Poor work due to lack of effort
   a) Keep in after school to make up work
   b) Removal of privileges
8. Theft
   a) Replacement of property
   b) Report case to parents
   c) Report case to public officer
9. Immorality
   a) Oral reproof
   b) Report case to parents
   c) Suspension
10. Destruction of property
   a) Repair damage if possible; if impossible, pay for damage
   b) Report case to parents
   c) Report case to public officer
11. Lying about other pupils
   a) Oral reproof
   b) Public acknowledgment of fault

12. Forging signatures
    a) Oral reproof
    b) Report case to parents
13. Disobeying of regulations due to thoughtlessness
    a) Oral reproof
    b) Removal of privileges
14. Overzealousness in recitation
    a) Assignment of extra work
15. Open rebellion
    a) Corporal punishment
    b) Suspension
    c) Expulsion
16. Bullying
    a) Oral reproof
    b) Removal of privileges
17. Tardiness
    a) Keep in after school to make up work
    b) Report case to parents
    c) Report case to public officer

A MEASUREMENT OF THE EFFECT OF THE TEACHING OF RECREATIONAL READING

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It is much easier to measure the direct effect of the teaching of the work type of reading than to determine the results of the teaching of recreational reading. Such factors as rate of reading, comprehension of what is read, and ability to outline can be measured by means of standardized tests. While the desirable outcomes of the teaching of recreational reading may ultimately be as definitely defined as those of the teaching of work reading now are, at present there are practically no direct methods of measuring these outcomes reliably.

The Minneapolis schools had carried out an intensive program of work reading and planned a similar program for recreational reading. In order to arrange the program intelligently, it was decided to secure some data as to the present status of recreational reading. After some preliminary work, it was decided to make the basis of the initial investigation the determination of the extent to which the pupils in Grades III–VI, inclusive, had library cards. It was felt that the possession of library cards indicates at least potential interest in outside reading on the part of pupils and at the same time shows, to some degree, the extent to which teachers encourage pupils to read widely outside of school. The teachers in the several buildings were therefore asked to report the percentage of pupils in their rooms who had library cards. Certain precautions were to be observed in determining the actual ownership of a card. No attempt was made to determine the extent to which the pupils used their cards because of the obvious magnitude of the task involved.

When the data were received from the several schools, the schools were first grouped according to their distance from a library or a

library station. In Minneapolis there is excellent co-operation between the public library and the public schools. In a large number of schools there are library units maintained by the public library. Many schools in which there are no library units are located within five blocks of a library station. Other schools are more than ten blocks from a library station. The distance from a library would seem to be a factor that would influence the extent to which the pupils and the school make use of the services of the library. The three groups into which the schools were divided were defined as follows: Group I, library in building; Group II, library not in building but within five blocks of the school; Group III, library six or more blocks from the school.

TABLE I

DISTRIBUTION OF 127 CLASSES IN GRADES III–VI IN THE SCHOOLS IN GROUP I ON THE BASIS OF THE PERCENTAGE OF PUPILS WHO HAD LIBRARY CARDS

Percentage of Pupils Having Library Cards	Grade III	Grade IV	Grade V	Grade VI	Total
100	0	3	3	6	12
90–99	1	7	3	7	18
80–89	4	9	8	5	26
70–79	5	4	10	5	24
60–69	8	5	5	3	21
50–59	11	2	0	1	14
40–49	4	0	0	1	5
30–39	1	0	1	0	2
20–29	0	1	2	0	3
10–19	1	0	0	0	1
0–9	1	0	0	0	1
Total	36	31	32	28	127
Median	60.0	83.9	78.0	88.0	76.8

Another measure of distance that might have been used is the distance from the library to the homes of the individual pupils in each building. However, since the study was concerned with whole classes in the various schools, the distance of the library from the school was chosen as the basis of the study.

Table I shows the distribution of the classes in Grades III–VI in the schools in Group I according to the percentage of pupils who had library cards. This table shows wide variation within the grades. The range in Grade III is from one room in which less than 10

per cent of the pupils had library cards to one room in which more than 90 per cent of the pupils had cards. The variation in the other grades is also very great, the percentage of pupils having library cards ranging from 20 to 100 in Grade IV, from 20 to 100 in Grade V, and from 40 to 100 in Grade VI. In only twelve classes did all the children have library cards. The median for all classes combined is 76.8 per cent. The range in the grade medians is from 60 per cent in Grade III to 88 per cent in Grade VI. Apparently the fact that a library unit is in a school building is not an indication

TABLE II

DISTRIBUTION OF 107 CLASSES IN GRADES III–VI IN THE SCHOOLS IN GROUP II ON THE BASIS OF THE PERCENTAGE OF PUPILS WHO HAD LIBRARY CARDS

Percentage of Pupils Having Library Cards	Grade III	Grade IV	Grade V	Grade VI	Total
100	1	0	2	1	4
90–99	0	2	1	5	8
80–89	2	3	5	8	18
70–79	4	6	3	4	17
60–69	5	5	6	4	20
50–59	3	8	4	3	18
40–49	9	3	2	1	15
30–39	2	1	0	0	3
20–29	4	0	0	0	4
10–19	0	0	0	0	0
0–9	0	0	0	0	0
Total	30	28	23	26	107
Median	50.0	64.0	69.1	81.2	66.7

that the pupils use the library. It is, of course, obvious that much reading of a voluntary type is stimulated by material that is found in the home and that the attitude of the teacher is not the only factor that determines the character of the recreational reading done by the pupil. It should be pointed out that one of the schools having library units is located in a residential district of a superior type but the pupils in that school rank among the lowest in the city in the percentage of pupils having library cards.

The data for schools located within five blocks of a library station are given in Table II. The variation in this group of schools is not as great as that in Group I, the lowest percentage of pupils having library cards being 20 and the highest 100. However, the median

is somewhat lower; the median for all classes in Group II is 66.7 per cent as compared with 76.8 per cent for all classes in Group I. The median percentages for the various grades are also lower.

The facts given for Groups I and II are further accentuated by the data for Group III in Table III. The variation in this group is as great as that in Group I, the range being from less than 10 per cent to 100 per cent. The variation in Grades IV, V, and VI is greater in this group than in the other groups. The median for all grades is 60.7 per cent, which is less than the medians for all grades

TABLE III

DISTRIBUTION OF 168 CLASSES IN GRADES III–VI IN THE SCHOOLS IN GROUP III ON THE BASIS OF THE PERCENTAGE OF PUPILS WHO HAD LIBRARY CARDS

Percentage of Pupils Having Library Cards	Grade III	Grade IV	Grade V	Grade VI	Total
100	0	2	2	1	5
90–99	1	1	1	6	9
80–89	2	3	4	3	12
70–79	1	3	7	5	16
60–69	5	14	13	13	45
50–59	3	3	4	7	17
40–49	10	3	4	4	21
30–39	9	5	7	0	21
20–29	9	3	2	1	15
10–19	5	1	0	0	6
0–9	1	0	0	0	1
Total	46	38	44	40	168
Median	38.9	62.9	63.8	66.2	60.7

in Groups I and II. The medians for the several grades are also lower in Group III than in Groups I and II.

It can be seen from Tables I, II, and III that there is a direct relation in all grades between the extent to which pupils have library cards and the distance between the school and a library station. The effect of this factor is most striking in Grade III, where the percentage drops from 60.0 in Group I to only 38.9 in Group III. There is also a very large falling-off in Grade VI, the medians being 88.0 per cent in Group I and only 66.2 per cent in Group III. The decrease in percentage is least in Grade V. The reason for this condition is not evident. It should be noted that the difference in percentages between Grades IV and V in Group III is only 0.9;

between Grades V and VI, 2.4. These differences are much less than the differences between the grades in either of the other two groups. It is probable that distance from a library station is a vital factor in Group III but that the teachers' attitudes and the nature of the reading activities are the decisive factors in Groups I and II.

The teachers were asked to indicate the nature of the activities which they used to create interest in reading. These have been summarized in Table IV. The data for all grades have been combined

TABLE IV

ACTIVITIES CARRIED ON TO CREATE INTEREST IN RECREATIONAL READING

	Group I	Group II	Group III	Total
1. Library periods or book clubs	130	107	289	526
2. Visits to the library	17	4	6	27
3. Children bring books and magazines from home	7	6	28	41
4. Children take books home in order to finish selections	2	1	1	4
5. Books left in room to be read whenever possible	2	7	6	15
6. Dramatization of stories being read	10	7	14	31
7. Permission granted to read library books as a reward for good work in other subjects	5	2	9	16
8. Record kept of books read by means of lists, charts, posters, graphs, card catalogues, etc	40	40	90	170
9. Extra credit given for outside recreational reading	7	8	13	28
10. Teacher tells class first part of story to arouse interest	48	52	153	253
Number of teachers reporting	127	107	168	402

since there were no significant activities peculiar to a particular grade.

The activity that was checked most frequently by the teachers is "library periods or book clubs." This activity was checked most frequently in all groups. Certain teachers reported library periods and book clubs as two distinct activities; hence, the frequency figure for any group may exceed the total number of teachers reporting. The effectiveness of the activities listed must have varied considerably in view of the great variation in the results secured as measured by the extent to which the pupils had library cards.

The problems that are revealed by the results of this investiga-

tion are numerous. Many of them lend themselves to experimental study. There is no question but that the availability of books is an important factor in determining the extent to which books are read. However, the data presented suggest the fact that the teacher can do much to influence the outside reading of the pupils. Many different methods are being used to develop interest in free, extensive reading, but the effectiveness of these methods is not definitely known. The mere fact that a library station is located in a school is not an indication that the pupils are engaging in extensive reading. The necessity and the importance of a constructive attack on the program in recreational reading are emphasized by the results of this investigation. The information secured has been made available to the teachers in Minneapolis, and efforts are being made to devise methods of securing objective data on other phases of recreational reading.

EDUCATIONAL PRACTICE WITH RESPECT TO SELF-ASSURANCE

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Exact definition and measurement of a character or personality trait such as self-assurance seem to be still far from realized.[1] Children, however, show very important differences of a kind generally described as differences in self-assurance, and teachers are often active agents in shaping the trait in their pupils.

A co-operative study of character traits was undertaken by the writer with mature students and teachers in extension classes in psychology, eighty students contributing. Twenty-eight distinct practical suggestions were gathered in response to the question "What experiences can the teacher or parent provide which may help the child deficient in self-assurance to gain some degree of the trait?"

1. Never criticize lack of self-assurance.
2. Praise every effort made by the child.
3. Make the child leader in language games in which he must give directions to others.
4. Dramatize stories, giving to the child the part of a central character who portrays great self-assurance.
5. Give the child leading parts in plays, exercises, and programs.
6. Show confidence in the child's ability to perform.
7. Call on the child often for performances which are well within his capacity.
8. Give the child monitorial duties.
9. Intrust the child with important errands.
10. Assign tasks often, giving definite instructions only once, and refuse to answer questions thereafter.
11. After assigning tasks, leave the room and let the child carry out the work with no supervision.
12. Lead the child to read stories in which the central figures are characterized by high degrees of self-assurance.
13. Manage to have the child appointed presiding officer of class meetings.

[1] See the writer's early attempt to define the trait: "An Experimental Study of Character Traits," *Journal of Applied Psychology*, V (December, 1921), 297–317.

14. Interest the child in athletics as early as possible.

15. Give frank interviews in which you definitely exercise the child in speaking boldly to you while looking squarely into your eyes.

16. Give the child experience in producing tangible finished objects, as in practical arts.

17. Insist on cleanliness and neatness in dress.

18. Tell the child that his efforts, no matter how poor, will not be ridiculed.

19. Pair the child with a child not as good as he in the work.

20. Give the child experience in impersonal entertaining through telling interesting stories or reciting funny poems.

21. Greet failure to respond with an attitude of mild disappointment.

22. Encourage the child to play games in which he has a chance to excel.

23. Ascertain the child's most coveted form of reward and offer it for taking the lead in a common enterprise.

24. Show interest in the child's progress, rejoicing with him over difficult tasks accomplished.

25. Have the child say "I can" or "I will try," never "I can't."

26. Have the child make his own decisions and require positive answers.

27. Have the child meet many people and be compelled to converse with them.

28. Have the child repeat aloud this code every day: "I am power. I am life. I am energy. I am fearless. I am strong. I am free. I am success. I am well. Faith is clear, bright, shining within me. I shall be given wisdom. I shall triumph."

These twenty-eight suggestions were then presented to all cooperating students with the following instructions.

You are now asked to rank these suggestions in the order of their effectiveness and practicability; that is, place a "1" in the margin to the left of the one you regard as most practicable and effective, a "2" to the left of the one next most practicable and effective, and so on until you have numbered all of them. There are twenty-eight suggestions altogether. The number 28, then, will be attached to the one which you regard as least practicable and effective.

The students, most of them teachers, ranked the suggestions as follows: 3, 6, 9, 10, 11, 1, 2, 7, 4, 24, 19, 17, 25, 13, 20, 14, 23, 15, 16, 18, 21, 8, 27, 5, 26, 12, 22, 28.

These evaluations must not, of course, be regarded as significant for the judges were possibly prejudiced in favor of their own contributions in the list. Neither should it be necessary to remind the reader that, after all, present opinion and practice may have little value. There are some who insist that the limits within which any training may influence self-assurance are very narrow. Others are exceedingly optimistic with regard to the educational possibilities.

THE CHILD WHO IS A MISFIT

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Practically every school administrator is confronted with the problem of adapting his school to the peculiar needs of a few children who can never successfully do the academic work of the public school. The special training given to such children in opportunity rooms has proved to be very valuable in schools where such rooms can be organized; unfortunately, however, the opportunity room is impractical unless the school is large enough to furnish several pupils who need the special training which such a room affords. In schools where it is not possible to segregate handicapped children, such children are left to do the work of the regular classrooms as best they can. Because these pupils are not able to do the academic work of the expected type, they are repeatedly retained and soon become real problems.

This article reports the results of two case studies made by the teachers and the principal of a school in Indiana in an effort to provide the maximum educational opportunities for two boys. These boys were of junior high school age, but, since they were failures in academic achievement, they had been retained in a fourth grade.

CASE I

Chronological age.—14 years, 0 months, 14 days (beginning of second semester of school year 1927–28).

Mental age.—12 years, 4 months (beginning of second semester of school year 1927–28).

Otis I.Q.—88.

Height.—5 feet, 3 inches.

Weight.—112 pounds.

Parentage.—The father was addicted to drink, but he has been dead since the boy was very young. A stepfather was in the home for a few months, but the mother is now divorced. She is a very impressionable woman, irresponsible, and very indulgent with the boy.

Environment.—The mother and the boy live in furnished rooms and move frequently. The mother is employed occasionally in factory work but claims to be very weakly and works only part of the time. The remainder of the time they are supplied with the bare necessities of life by public funds, issued by the township trustee according to the Indiana law.

Health.—There is no apparent physical deficiency. The boy looks somewhat frail and is five pounds—less than 5 per cent—underweight. He is probably underweight because of improper diet. He smokes cigarettes, and he does not seem to enjoy strenuous play, but he apparently has no serious physical handicap of any kind.

Educational background.—The boy completed the first three grades in various schools in South Bend, Indiana, as the family moved about that city. The next move took the family to California for a year, and there the boy is supposed to have been in the fifth grade. On returning to South Bend, he was placed in a IV B section in the school from which he had withdrawn when he went to California. At the close of the semester he was promoted to Grade IV A. At that time the family moved to Mishawaka and located very near the senior high school building. On the opening day of the new semester the boy went to the high school and enrolled. During the semester he attended classes intermittently, said nothing about his past, postponed getting his credentials from California, and stayed out of school because of "sickness" when the administration was insistent. When at last the truth was learned, there were only a few more weeks in the semester, and with a few clever moves the boy and his mother succeeded in avoiding the attendance department until the beginning of the next semester. At that time the boy entered the Battell School, and this school was confronted with the problem of giving him the best possible chance to acquire profitable training for adult life.

Should he be placed in Grade IV A? South Bend had assigned him to that grade. Should he be placed in Grade VI B? He claimed that the California school had promoted him to that grade. Should he be placed in the junior high school? He had been attending the senior high school!

Method.—When the boy entered the Battell School, an effort was

made at once to acquire all the information possible with regard to him. He was given a battery of educational tests and the Otis Self-Administering Test of Mental Ability, Intermediate Examination, Form A. He was seated in the principal's office and given type work in various subjects until a decision could be reached. In the meantime, facts were being gathered and analyzed.

He was found to be very weak in arithmetic. On the other hand, he could read as well as the average seventh-grade pupil, according to the results secured with the Burgess reading scale. His oral reading seemed to be very acceptable. He had limited ability in history and in geography. His spelling was poor. His writing was only fair. His ability in the use of language was average. These facts and those which have been previously reported were the basis of the final decision in his case.

Decision.—It was decided that the boy should be given a trial in a VII B class in the junior high school. His age would make him a total misfit in Grade IV A. He was large, and his voice had changed. He could read fairly well. He would never attend school after reaching the limit of the compulsory-school age (sixteen years in Indiana). He was not unusually dull. His chief difficulties were that he had changed schools, was absent, and did not apply himself to school work. In the junior high school he would have an opportunity to take part in a number of activities which would not be offered to him in the elementary school. Manual training (vocation-finding type), physical training, music, art, and civics would be offered to him. In addition, the extra-curriculum activities of the school might be used to motivate his work. At least, he would be with a group of boys and girls of his own size and age, and their interests would be more like his. He would be in a social group more favorable to his achievement.

Results.—The results have not been disappointing. A record of continual absence and tardiness was changed to an attendance record of a fairly acceptable standard. Problems of discipline were reduced to the minimum. His marks are not high, but they were not expected to be. Judged by the standards set up for the school, his work has not been satisfactory; he has therefore received many failing marks. On the whole, however, these failures represent more

achievement than would passing marks in Grade IV A. The marks shown in Table I have been assigned by the various departments of the junior high school. They are averages for his work as a whole in each of the departments. Further improvement is possible if proper pressure can be applied. The health habits of the boy are not altogether satisfactory. He is neither thorough nor reliable in the

TABLE I

MARKS OF CASE 1 FOR FIRST TEN WEEKS OF SEMESTER*

Subject	Mark
Reading	B
English	D
Spelling	F
Writing	D
Arithmetic	F
Geography	D
History	F
Civics	F
Music	D
Art	D
Physical training	D

* Number of days absent, 1½; number of times tardy, 3.

accomplishment of assigned tasks. He is not as industrious as he should be. There is too much carelessness and indifference in his attitude. These are problems for continual observation and solution.

CASE 2

Chronological age.—14 years, 11 months, 26 days (beginning of second semester of school year 1927–28).

Mental age.—6 years, 5 months (spring of 1927, Stanford-Binet test).

I.Q.—About 40.

Height.—5 feet, 9 inches.

Weight.—133 pounds.

Parentage.—The father was trained in a trade school and is said to have been a good plumber but a man of weak mentality. He has been dead for several years. The mother is a timid woman and does not impress one as being at all strong mentally. She is conscientious but seems very helpless in meeting situations.

Environment.—The home is spacious, well furnished, clean, and modern in every respect. The boy lives with his mother and a sister.

Since neither of them understands how to manage him, he is allowed to have his own way too much for his own good. Neither the mother nor the sister attempts to teach the boy anything at home.

Health.—The boy seems to be in very good physical condition in every way. He is only two pounds underweight.

Educational background.—It is reported that, when the boy first entered school, he had not yet learned to walk. He was brought to school and then crawled on all fours. His first teachers taught him to walk and to talk. Gradually he was assigned to a higher grade until in the autumn of 1927 he was found in a IV B section unhappy, idle, and mischievous—a general misfit. During the first semester the writer observed the boy and studied his case, leaving him in the IV B section. The one thing he has accomplished during the years he has attended school has been to acquire the art of writing his own name and to learn to "draw" a given copy.[1] If the teacher writes a sentence on his paper, the boy can make a very legible copy of it. This is indeed rather remarkable since he does not read a word and does not realize what it is that he writes.

The experiment.—It was decided that the boy should be assigned to Grade VII B, the lowest class in the junior high school. This decision may seem unwise to some, since he can neither read a word nor distinguish one number from another. Of course, he should be in a special school rather than in the public school. His name is on the waiting list, but, in the meantime, it is better for him to be in the public school rather than on the streets with older boys. Furthermore, the law requires him to be in the public school until the state school has room for him. Therefore, it is only a question of where he can get the most benefit from the public school.

Results.—Marks are not assigned to the boy in all departments, but he is taking part in certain types of work, and he is hearing what is said in other classes. The data on his cumulative record card are shown in Table II. The results are not disappointing.

[1] The following sample (reduced one-half) shows his ability. Only one word is misspelled, and the writing is very legible. The boy could not read a word of it.

TABLE II

CUMULATIVE RECORD CARD OF CASE 2

School	Semester Ending	Days Absent	Times Tardy	Conduct	Grade	Reading	English	Spelling	Writing	Arithmetic	Geography	History	Civics	Music	Art	Manual Training	Domestic Science	Hygiene	Physical Training	Promotion
Entered from Kennedy School—September, 1923																				
Battell	1–1924	0	0	C	II B	F	F	F	F	F	...	...	...	F	F	...	...	...	...	Retained in II B
Battell	6–1924	0	0	C	II B	F	F	F	F	F	...	...	...	F	F	...	...	...	...	Retained in II B
Battell	1–1925	0	0	...	II B	Unsatisfactory work														Assigned to II A
Battell	6–1925	1½	0	...	II A	F	D	F	D	F	...	...	...	C	D	...	...	...	...	Retained in II A
Battell	1–1926	0	0	D	II A	F	D	F	C	F	...	...	...	D	D	...	...	...	...	Assigned to III B
Battell	6–1926	4	0	D	III B	No marks														Retained in III B
Battell	1–1927	8	0	D	III B	Special pupil														Assigned to III A
Battell	6–1927	13½	0	D	III A	Special pupil														Assigned to IV B
Battell	1–1928	31	0	F	IV B	Special pupil														Assigned to VII B
Battell*	6–1928	1	0	C	VII B	...	...	...	D	...	...	...	D	C	C	A	...	...	D	.....

* This line shows the averages for only the first ten weeks of the semester.

CONCLUSIONS

The following conclusions seem to be justified by the case studies here reported.

1. An adequate investigation of the factors influencing the life of a child is an aid to the proper placement of the child.

2. The junior high school offers certain opportunities to the average child which can be grasped even by children who are seriously handicapped.

3. The placement of a handicapped pupil is an important factor in determining his conduct, attendance, attitude, and academic achievement.

Educational Writings

REVIEWS AND BOOK NOTES

Dividing the mind into molecules and atoms.—The development of any science is a fascinating process. The social sciences, fraught as they are with the responsibility of creating and guarding human values, possess an intensity of interest that is unique. We are at the present time witnessing the conversion of human conduct from chance and chaos as bases to principles and laws. Some say that it is a hopeless and impossible task, while others work steadily, creating a new reality. We are here concerned with a fundamental point in the progress of psychology from superficial observation to an applied science. A more complete knowledge of mental traits will certainly mark definite progress.

Spearman has for some years challenged the thinking of psychologists with evidence that there is some kind of general factor characteristic of an individual or peculiar to him which affects to some extent all his mental activities. The various activities also have individual factors which, in connection with the general factor, determine the level of attainment in the different specific abilities. After a preliminary publication and several years of trial, criticism, and collaboration, Spearman has issued in *The Abilities of Man* (1927) what he considers his final statement of the theory. Kelley now issues a definite challenge to Spearman's conclusions.[1] He advances evidence to show that there is not one general factor running through all of an individual's activities but a number of rather general factors. He isolates and identifies these.

Kelley's book is also an outgrowth of several years of work. Definite foreshadowings of his technique are evident in *The Influence of Nurture upon Native Differences* (1926), and in *Interpretation of Educational Measurements* (1927) a preliminary list of the separate traits is presented. Outside of the general interpretations and conclusions, the chief contribution is the presentation of the technique used. His sixteen theorems reveal the minimal number of general factors which will account for several variables, and the conditions required. The whole third chapter represents much painstaking analysis and ingenuity. It will undoubtedly be the basis of considerable study and debate for some time to come.

[1] Truman L. Kelley, *Crossroads in the Mind of Man:* A Study of Differentiable Mental Abilities. Stanford University, California: Stanford University Press, 1928. Pp. viii+238. $4.00.

There is much to be said concerning the interpretation of Kelley's work and findings. Interpretation to a certain extent lies outside the scope of objective evidence, and hence "common sense" is a legitimate basis for raising certain questions concerning the interpretation offered. The remarks that follow have little, if anything, else as a basis.

"This study is an experimental attempt to determine the existence of inde pendent mental traits present throughout life." This is the publisher's statement, but it seems to express clearly the spirit and the aim of the study as indicated by various passages. Yet to the reviewer's mind neither the independence of the traits nor their inherent permanence is established by the study.

No definition or criterion of "independence" is made explicit. If the traits are occasionally independent of one another, certainly a correlation will be produced through varying more general mental factors which must be acknowledged on the basis of ordinary experience—such factors as emotions, mental health, physical health (conditioning cortical activity), mental set, intensity of immediately preceding experiences, and many others characteristic of the individual in part and produced by circumstances in part, as is all mental activity.

The traits Kelley isolates seem to be nothing more than convenient units of common experience. That the statistician can analyze a "spatial" factor out of the scores made on a number of different tests so designed that they involve spatial concepts in varying degrees means nothing more than that a statistical technique has been devised which is adequate to detect such underlying factors. It does not in the least indicate that the spatial concepts thus called into play are inherent mental functions. Neither does the fact that a spatial factor operates to yield scores from the kindergarten through the seventh grade on tests requiring spatial concepts argue that this is an inherent mental function. Spatial relations are a fundamental and almost constant phase of experience from birth throughout life, and there is no reason for believing that a spatial factor is any more a unitary or natural mental function than is any other form of experience; that is, it is hard to believe that such common traits arise and develop through any peculiar structure of the brain per se.

Furthermore, if all of one's spatial experiences were so conditioned that time is an essential part, as in gymnastic feats, the spatial factor would become a "space-time" factor, such as finds a part in the concepts involved in the Einstein theory, from which neither space nor time can be isolated. The same thing may be said regarding all the traits isolated by Kelley's tests. The real challenge to his contention is that he isolate some mental factors not found in the experience of the subjects.

It seems probable that one can (1) break up any of Kelley's unitary traits into component traits by utilizing tests that will do for one of the observed traits what Kelley has so far done for mental activity in general; (2) add to the list of traits almost indefinitely as tests are devised which will explore the entire realm of human experience and activity (This is, of course, not true if the cate-

gories are made so broad that all activity is soon covered.); (3) within fairly broad limits, condition the strength or development of any of these factors in an individual by proper training. While these contentions run counter to the tenor of Kelley's discussion, the reviewer cannot find any evidence in the study to render them improbable. Certainly it must be noted with considerable regard that the physicist has recently broken up the atom.

Kelley's criticisms of Spearman's findings are chiefly (1) that his populations are so small that the probable errors will permit the theory of a single general factor to stand and (2) that, where the general factor exists, it is probably an unanalyzed composite due to spurious heterogeneity in such traits as maturity, sex, and race. While these criticisms are worthy of note, the reviewer cannot feel that Spearman's theory is as yet invalidated.

As stated, there are evidently other general factors. Spearman recognizes one general factor, a number of group factors, and an indefinite number of specific factors. Why not postulate an orderly hierarchy of factors or traits with varying degrees of generality and, of course, varying degrees of intensity? Physics has found such in its units of mass, molecule, atom, and electron. The mind is probably much more complicated, not less so.

The foregoing criticisms of interpretation do not destroy the usefulness of the findings. It may, in fact, be more useful, though not theoretically so interesting, to devise tests that will isolate and measure certain phases of activities which an individual is called upon to perform than to ascertain ruts (p. 23), or inherently unitary performances, in the brain.

The use which will be made of the results must be determined on social grounds, not on the basis of psychology. For instance, Kelley suggests (p. 230) that his results show that it is possible for a candidate for the Doctor's degree to be a brilliant mathematician and poor in English and that, therefore, he should not be required to attain proficiency in English. Experience renders Kelley's study unnecessary to establish the first point; experience also renders his conclusion of very dubious validity. Final decision must be based on the determination of the combination of traits in any individual and the degrees of each trait that will render him most useful to society.

DOUGLAS E. SCATES

INDIANA UNIVERSITY

The present status of supervision.—Probably no division of the field of education has been marked by a more rapid increase in interest and emphasis during the past five years than that which has taken place in supervision. This statement may be substantiated by several types of evidence. The *Journal of Educational Method*, the official organ of the National Conference on Educational Method, an association of persons interested in supervision and teaching, was established seven years ago. In the early part of 1928 the first yearbook of this organization, entitled *Educational Supervision*, was published and discussed. The Appleton Series in Supervision and Teaching, edited by Professors

Barr and Burton, at this writing includes four books, one of which is an analysis[1] of the organization and administration of supervision in city school systems.

The authors of this book define supervision as "a specialized function devoted to the inspection, direction, and improvement of the educational activities of individuals working at one administrative level, administered by superior officers working at higher administrative levels" (p. x). The origin and development of supervision are discussed in a historical treatment of the rise of teacher-training, administrative supervision, and special supervision. Data secured through questionnaire investigations and arranged in numerous tables indicate the present status of supervision and the distribution of supervisory duties. The place of special supervision and the interrelations of supervisory officers are shown through statements from school surveys, data from investigations, and other educational literature on the subject. Three major types or systems of supervisory organization (extrinsic-dualistic, line-and-staff, and co-ordinate divisional) are outlined with concrete illustrations and discussed. Typical supervisory organizations as found in Cleveland, San Francisco, Cambridge, St. Louis, Spokane, Long Beach, Madison, and Hamtramck are described in detail. In a treatment of supervision in small school systems, it is suggested that the principles of organization are not greatly different from those in large systems although certain difficulties are involved in providing economical supervision. In a well-written summary chapter, five principles of efficiency in the organization of supervision are outlined and discussed: (1) centralization of responsibility, (2) functional assignment of duties, (3) facility for co-operation, (4) integration of educational outcomes, and (5) flexibility of operation.

The book includes eighty-two tables and twenty figures. Since the data presented in these tables and figures are of major importance in the discussions of the various supervisory problems treated, it seems that the reader should have the guidance of lists of tables and figures. A well-selected bibliography of 159 references is annotated in part. However, if annotation is attempted at all, the reader should have more adequate descriptive statements than a single word or phrase, such as "good," "excellent," "brief," "brief note," and "summary of tendency." The index could have been improved by including references to all the authors and studies mentioned in the text, in the footnotes, and in the bibliography since the book will serve in many instances as a handbook or manual of information. If a book is to serve such a purpose, the index must be unusually complete.

The authors have presented an excellent statement of typical organizations and present practices in supervision as found in large city systems. They have summarized a great deal of data and educational literature on supervision not generally accessible to school officers and students of education. The authors have been wise enough to avoid proposing an ideal supervisory organization

[1] Fred C. Ayer and A. S. Barr, *The Organization of Supervision:* An Analysis of the Organization and Administration of Supervision in City School Systems. New York: D. Appleton & Co., 1928. Pp. xviii+398.

but have not hesitated to introduce critical and interpretative comment at appropriate intervals concerning the improvement of present practices. An analysis of the various studies cited reveals an interesting state of affairs in the field of supervision. It appears that with one exception the major techniques of investigation in education are adequately represented: philosophical, historical, survey, questionnaire, statistical, case study, and activity analysis. Only the experimental method seems to have been slighted. Evidently the next forward step in supervision is to subject various present practices to experimental tests in order to determine the merits of each. The authors have made an initial contribution toward this end by presenting in organized form a description of the status of supervision, which should prove useful to classes in supervision, classes in administration, supervisors, superintendents, principals, and teachers.

CARTER V. GOOD

MIAMI UNIVERSITY

Meeting individual needs in a typically organized school.—Platoon schools, junior high schools, special classes, individual instruction—none of them automatically takes account of the individual. It is rather the provision of educational experiences that harmonize with each boy's and girl's abilities and needs that really leads to individual adjustment. On the basis of this assumption Paul R. Mort proceeds in a recent book,[1] first, to reveal in fresh and comprehensive fashion the wide differences that exist in pupils and, second, to show how the numerous possible points of flexibility in the typical American system of education can be used in adapting the school to these differences.

Such an approach as this has immediate value to teacher and administrator alike. No overnight revolution in type of organization is advocated. Instead, teachers in their rooms and principals in their buildings are shown how they may work from within to eliminate steadily the appalling array of maladjustments that a study of individual children reveals.

The value of the book is enhanced by the concreteness of the situations selected for discussion. Chapter vi, which deals with the problems of class instruction, uses for illustrative purposes actual pupils in a fifth-grade class. A detailed record of each pupil is examined, the information that every teacher should have about each pupil being used. Class marks, test records, intelligence ratings, academic and non-academic interests, descriptions of the home environment, vocational outlook, and after-school activities are made to serve as bases in determining what each child should do in school and as cues for differentiation. Child-accounting thus takes on a broader meaning. It becomes a plan for gathering data about the child that are significant in individualizing school experience.

Correct placement within the school organization is the first of the various types of adjustment considered. Probably hundreds of thousands of children

[1] Paul R. Mort, *The Individual Pupil in the Management of Class and School*. Chicago: American Book Co., 1928. Pp. 384. $1.52.

are in one organization when they should be in another, but putting an elementary pupil in the junior high school where he belongs or transferring a dull child from a regular class to a special class is only one step. Acceleration and retardation may be used with discrimination to yield further results. Acceleration is shown to be a better agency for adjustment than is generally recognized. Retardation, on the other hand, is found to be both badly misused and overused. Adaptation within the classroom to the more refined and variable individual differences is revealed as the climax of the efforts toward adjustment.

The author recognizes and appraises the administrative aids that are intended to make easier the path toward provision for the individual. Visiting teachers, deans of girls, counselors, and guidance directors are shown to render most vital service. Enriched curriculums, departmentalization, ability grouping, and individualization are discussed as means of saving American education from disastrous inflexibility although no one of them can serve as an antidote for the evils that have crept in with group instruction.

Definite effort is made to train the reader in recognizing the need of adjustments and in using the techniques of testing and individualization that modern education is rapidly making available. More than thirty discriminately chosen problems, each one described in detail and seemingly based on a real situation, aid greatly in the attainment of these aims. Specific bibliographical references further expand the scope of the book. Some seventy titles of materials for individual instruction now available are found in the Appendix. The author succeeds admirably in making the book a handbook for continuous use in the schoolroom as well as a valuable textbook for college classes.

KNUTE O. BROADY

UNIVERSITY OF NEBRASKA

A guide to fairy tales for school use.—In 1919 a committee of Iowa educators, competing with committees from twenty-five other states, won a $20,000 prize offered by the Character Education Institution, Washington, D.C., for the best statement of character-training in the public schools. Following its initial success, the Iowa committee has continued and extended its work under the title "The Institute of Character Research," with headquarters at the State University of Iowa. One of its undertakings,[1] a monumental piece of work, has been published in the form of a guide to the best character-building literature in English.

The guide is limited to the field of literature generally called "fairy tales," including folk stories, fables, myths, legends, hero stories, romance cycles, fantasies, and a few examples of modern animal stories and nature fiction (p. 3). It endeavors (1) "to lift out from the mass of commonplace literature the best selections, to label them as superior, and even to specify their degrees of merit"

[1] Edwin D. Starbuck, assisted by Frank K. Shuttleworth and Others, *Fairy Tale, Myth, and Legend.* A Guide to Literature for Character Training, Volume I. New York: Macmillan Co., 1928. Pp. xiv+390. $2.00.

(p. 11); (2) to classify these selections in thirty-two ethical situations (p. 30); and (3) to allocate the selections to the grades in which they can be most profitably read without supervision (p. 33).

A sample entry will indicate the nature of the information concerning each item in the grade book lists.

206** AT THE BACK OF THE NORTH WIND. George MacDonald. McKay, 1919. 342 pp., ill. V (3–8).

The idealized story of a child, the beautiful North Wind who visits him, and the strange country at her back; poetically conceived and competently written. IMAGINATION, HOME (love, service), WORK (responsibility), IDEALS (aspiration), RELIGIOUS VALUES.

Each book or story is characterized by a symbol (**, *, A, B, C, D, indicating descending ranks of excellence); the Roman numeral indicates the most suitable grade; and the Arabic numerals in parentheses indicate the range of grades in which the story may prove useful.

Part III of the guide, called "Situations List," classifies books and stories according to the various ethical situations to which they apply. For example, all stories in which the situations exemplify achievement are classed together, and their grade placement is indicated; these are followed by classifications of stories touching on adventure, adversity, and twenty-nine other moral situations. The guide is equipped also with admirably planned indexes: an Attitudes Index, which refers the reader to all stories portraying cheerfulness, for example; a Title Index; and an Author Index.

Eight criteria of literary excellence were applied to approximately 90 per cent of all folk-lore materials available in English; each piece was evaluated by four experts trained in literary criticism. The standards of judgment included "unity, right craftsmanship, agreeable emotional tone, effectiveness, artistry in appeal, truthfulness, refinement of the fundamental human attitudes, and proper orientation" (p. 13). The authors affirm that the trustworthiness of the guide rests on careful treatment of the four judgments by means of a quantitative scale, on the prompt re-reading of all selections concerning which there was material disagreement among the four experts, and on numerous comparisons of the judgments of the four experts with the judgments of other groups. In addition, 391 children in two school systems reported on the ease or difficulty of thirty-two stories; the data derived indicated that "80 to 90 per cent of the stories have been placed in their best grade" (p. 35).

The guide will be of great service to those who believe in the functional values of literature. The undertaking is highly commendable. Minor exception may be taken, perhaps, to the comparison made with the *Winnetka Graded Book List.* In explaining certain discrepancies between the Iowa "findings" and the Winnetka "findings," the authors of the present book attribute such divergencies to "failure" in the Winnetka technique (p. 35). There are certainly possibilities of weakness or failure even in the Iowa technique, which relies chiefly on the judgments of four "experts." Moreover, when all is said, a reli-

able appraisal of a book is more likely to be secured by trying it out with children, as the Winnetka workers did, than by treating statistically the expert opinions of adults, as the Iowa workers did. "People who live in glass houses should not throw stones" is an ethical principle which the authors of the guide might have scrupulously followed.

R. L. LYMAN

An experiment in pre-kindergarten education.—The nursery school is so new an institution in this country that the literature pertaining to it has been confined chiefly to brief reports and discussions in educational journals. All those interested in the nursery-school movement will welcome, therefore, the first complete report[1] of an experiment in this field which has extended over a period of eight years. The nursery school which Miss Johnson describes is associated with the Bureau of Educational Experiments, New York City. This school is unusual in that it enrols only eight children from fourteen to thirty-six months of age, while its staff consists of a director, two other full-time teachers, and one part-time teacher who prepares and serves the meals.

The first section of Part I deals with the author's point of view concerning "two growth impulses—the impulse to be active and the impulse to experiment." The educational program of the nursery school is planned primarily in terms of affording opportunity for the wholesome development of these impulses. "There are procedures which we expect our children to learn; there are skills in dealing with the materials which we hope they will acquire; but most of all we are concerned with their developing an attitude of readiness to act, which is characteristic of the creative, dynamic personality" (p. 11). Hence, the children are encouraged to imitate others and to carry forward their own activities within the limits necessarily set by the physical and the social environment. In the second section of Part I, "Habits and Conventions," the author distinguishes sharply between the fields within which children may experiment profitably under supervision and those in which they must be habituated to certain types of behavior. They may, for example, explore all the possibilities of kiddie kars, but they may not deal experimentally with their food.

Part II deals with the planning of the environment, both physical and social, and discusses the activities of the children in relation to the play materials and to the children and adults who make up the group. It also describes the observation of language forms and the procedure with reference to language development.

Part III, about one-half of the entire book, describes the methods of keeping records of children's growth. These records include charts for recording behavior with regard to sleep, food, elimination, etc.; detailed reports of children's observed responses to the various forms of play equipment, to the other children, and to the teachers; and information concerning the growth of children

[1] Harriet M. Johnson, *Children in the Nursery School.* New York: John Day Co., 1928. Pp. xx+326. $3.00.

in language and rhythms. The recorded observations are "the source material—the evidence on which we rely to test out and check up our statements regarding individual children and also regarding facts of growth" (p. 313). Out of this mass of carefully recorded observations of children's responses from day to day for eight years, Miss Johnson and her co-workers have developed the educational philosophy and the working procedure for the education of small children which are presented in Parts I and II of the book.

In Part IV, which is a brief summary and conclusion, the author states as follows her belief concerning the values of such nursery-school experience as she has described:

> My conclusion is that they [the children] are leading productive lives. They are learning to live happily away from intimate contact with the family whose concerns are most emotionally bound up with theirs; they are establishing control over their own bodies so that they approach the physical environment with readiness and confidence; they are learning to route themselves through a day with the least possible amount of direction and dictation; they are establishing interests which they can explore independently; and they are learning to share the life of a social group, to modify their demands upon the world in relation to their fellows, and to appreciate the compensations as well as the restrictions that social living implies, with the result that their emotional lives are functioning on a normal level [pp. 314–15].

In reading the book, one is impressed with the scientific attitude of the author toward her problem and her sincerity of purpose. Everyone interested in nursery-school education, especially those engaged in nursery-school teaching, should give the book careful study. It is a distinct contribution to the field.

ALICE TEMPLE

The story of America in the making.—One of the most recent adventures in textbook-making in American history for the upper elementary grades exists at present in two parts bound separately.[1] Part One, "Founding the Nation," carries the story to 1789; Part Two, "The Growth of the Nation," continues the story from 1789 to the present day. These two parts are later to appear bound in one book under the title "From Wilderness to World Power."

The authors of these books claim to have told the story of America in its world-setting and to have made the contributions of America to world-civilization a part of the theme of their story. In their approach to the subject, the authors use a combination of the topical and the chronological methods. The chapters are supposed to deal with topics which follow one another in a more or less chronological order. Besides divisions called "chapters," there are divisions which might be thought of as sections, the former being what the authors consider minor units and the latter, major units. Each unit is supposed to have a central thought.

[1] Charles E. Chadsey, Louis Weinberg, and Chester F. Miller, *America in the Making:* Part One (Founding the Nation), pp. xii+338, $1.28; Part Two (Growth of the Nation), pp. xiv+468, $1.44. Boston: D. C. Heath & Co.

Both books are replete with study helps, which call for a variety of pupil responses. These responses involve reports, related readings, check-up of mastery, the making of charts and graphs, and the collection of pictures. There is also an attempt in the study helps to relate history to geography, current events, and civics.

All the illustrations are pen-and-ink drawings made exclusively for the books. They have little or no historical value and are difficult to justify from any historical standpoint. The map equipment is of two types, namely, cartoon maps and descriptive maps. The cartoon maps are supposed to illustrate historical ideas; the descriptive maps, to show the location of historic places and events. If the map equipment in these books approaches the ideal, a great deal of time and money has been needlessly wasted by publishers of competing books in the field.

R. M. TRYON

CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY, AND PRACTICE

BRANOM, MENDEL E. *A Teacher's Geography.* New York: Macmillan Co., 1928. Pp. xvi+252.

BROWNELL, WILLIAM A. *The Development of Children's Number Ideas in the Primary Grades.* Supplementary Educational Monographs, No. 35. Chicago: Department of Education, University of Chicago, 1928. Pp. xiv+242. $1.50.

BUSWELL, GUY THOMAS. *Summary of Arithmetic Investigations (1927).* Chicago: Department of Education, University of Chicago, 1928. Pp. 22. $0.15.

CAMPBELL, OLIVE DAME. *The Danish Folk School:* Its Influence in the Life of Denmark and the North. New York: Macmillan Co., 1928. Pp. xvi+360.

CAVINS, LORIMER VICTOR. *Standardization of American Poetry for School Purposes.* Chicago: University of Chicago Press, 1928. Pp. x+134. $1.50.

CRAWFORD, CLAUDE C. *The Technique of Research in Education.* Los Angeles, California: University of Southern California, 1928. Pp. 320.

FERRIÈRE, ADOLPH. *The Activity School.* Translated by F. Dean Moore and F. C. Wooton. New York: John Day Co., 1927. Pp. xviii+340. $4.00.

GATES, ARTHUR I. *New Methods in Primary Reading.* New York: Teachers College, Columbia University, 1928. Pp. x+236.

GRAY, WILLIAM SCOTT. *Summary of Reading Investigations (July 1, 1926, to June 30, 1927).* Chicago: Department of Education, University of Chicago, 1928. Pp. 48. $0.20.

GRIZZELL, EMIT DUNCAN. *Education: Principles and Practices.* New York: Macmillan Co., 1928. Pp. xvi+428.

HOLLINGSHEAD, ARTHUR DACK. *An Evaluation of the Use of Certain Educational and Mental Measurements for Purposes of Classification.* Teachers College

Contributions to Education, No. 302. New York: Teachers College, Columbia University, 1928. Pp. x+64.

HUBER, MIRIAM BLANTON. *The Influence of Intelligence upon Children's Reading Interests.* Teachers College Contributions to Education, No. 312. New York: Teachers College, Columbia University, 1928. Pp. 40.

HULL, CLARK L. *Aptitude Testing.* Yonkers-on-Hudson, New York: World Book Co., 1928. Pp. xiv+536. $2.68.

KNIGHT, FREDERIC B., and BEHRENS, MINNIE S. *The Learning of the 100 Addition Combinations and the 100 Subtraction Combinations.* New York: Longmans, Green & Co., 1928. Pp. xiv+82. $1.00.

LOGASA, HANNAH. *The High School Library:* Its Function in Education. New York: D. Appleton & Co., 1928. Pp. x+284. $1.75.

MEADER, EMMA GRANT. *Teaching Speech in the Elementary School.* Teachers College Contributions to Education, No. 317. New York: Teachers College, Columbia University, 1928. Pp. vi+130.

ROBERTS, ALEXANDER CRIPPEN, and DRAPER, EDGAR MARIAN. *Extraclass and Intramural Activities in High Schools.* Boston: D. C. Heath & Co., 1928. Pp. xviii+530. $2.40.

SCHAAF, WILLIAM LEONARD. *A Course for Teachers of Junior High School Mathematics.* Teachers College Contributions to Education, No. 313. New York: Teachers College, Columbia University, 1928. Pp. vi+160.

SEARS, JESSE B. *Classroom Organization and Control.* Boston: Houghton Mifflin Co., 1928 (revised). Pp. xii+400. $2.15.

SHULTZ, IRVIN TABOR. *A Descriptive and Predictive Study of a Class in a School of Education.* Philadelphia: University of Pennsylvania, 1928. Pp. 132.

SMITH, HENRY LESTER, and WRIGHT, WENDELL WILLIAM. *Tests and Measurements.* Newark, New Jersey: Silver, Burdett & Co., 1928. Pp. vi+540+x. $3.00.

STEPHENS, STEPHEN DEWITT. *Individual Instruction in English Composition.* Harvard Studies in Education, Volume 11. Cambridge, Massachusetts: Harvard University Press, 1928. Pp. xiv+150.

STILLMAN, BESSIE W. *Training Children To Study.* Boston: D. C. Heath & Co., 1928. Pp. xx+248. $1.60.

STURTEVANT, SARAH M., and STRANG, RUTH. *A Personnel Study of Deans of Women in Teachers Colleges and Normal Schools.* Teachers College Contributions to Education, No. 319. New York: Teachers College, Columbia University, 1928. Pp. 96.

SYMONDS, PERCIVAL M. *The Nature of Conduct.* New York: Macmillan Co., 1928. Pp. xii+346.

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